DOCUMENT RESUME

ED 205 479 SP 018 554

AUTHOR	Morsink, Catherine, Ed.
TITLE	Mainstreaming: Making it Work in Your Classroom.
INSTITUTION	Kentucky Univ., Lexington. Coll. of Education.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
PUB DATE	May 81
GRANT	G007801072
NOTE	89p.: For related document, see SP 018 172.
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Classroom Environment: *Classroom Techniques: Discipline: Elementary Education: Grade 3: Learning Disabilities: Lesson Plans: *Mainstreaming: *Mathematics Instruction: Mild Mental Retardation: *Reading Instruction: Teacher Attitudes: *Teaching Methods: *Writing Instruction

ABSTRACT

This teacher's manual includes materials and descriptions of methods developed for the elementary school teacher who deals with mildly mentally retarded children in the regular classroom. The first chapter presents ideas about managing the classroom learning environment along three dimensions: preventive discipline, selected intervention strategies, and suggested educational reinforcers. The discussion features examples of selected practices which were implemented and found to be effective. The second chapter describes reading activities for the child who functions a year or more below grade level in reading. These include assigning the child a reading book at instructional level, designing lesson plans, providing appropriate instruction, and measuring progress. The third chapter presents suggestions for working with mildly handicapped children in the areas of spelling, handwriting, and selected aspects of written expression. In the final chapter, teaching math to the mainstreamed child is addressed. These children often have difficulty in working with abstract symbols, recalling unrelated facts, and solving problems systematically. They may also have reading difficulties. Strategies for dealing with each of these problems are outlined, and sample remedial lesson plans are presented. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED205479

MAINSTREAMING

Making it work in your classroom

Catherine Morsink, Editor

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Catherine Morsink
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

University of Kentucky
Dean's Grant Project
Lexington, Kentucky

May 1981

SP018554

Supported in part by B.E.H. Grant Number G007801072

MAINSTREAMING: MAKING IT WORK IN YOUR CLASSROOM

Catherine Morsink, Editor

Dean's Grant Project
College of Education
University of Kentucky
Lexington, Kentucky

May 1981

FOREWORD

The College of Education Dean's Grant Project at the University of Kentucky has focused on opening doors of opportunity to all persons with individual differences through improving personnel preparation programs for education of the handicapped. Project activities have concentrated on the stimulation of both graduate and undergraduate program changes and the encouragement of staff development efforts.

The effectiveness of our work with prospective teachers and with experienced school personnel has been lessened by the need for college faculty to relate course work to recent and direct experience in the public schools. Too often ideas relating to mainstreaming and the teaching of children with learning handicaps in the regular classroom lacked the reality of direct experience. To remedy this situation, Dr. Catherine Morsink, co-director of our Dean's Grant Project and a University of Kentucky professor of special education, proposed to return to a public school classroom for a full semester to teach a regular third grade group which included a number of "mainstreamed" handicapped children. The principal purposes of the activity were (1) to identify problems and issues having implications for the design of initial preparation programs of classroom teachers, and (2) to explore the feasibility of such experience as basis for staff development of professional personnel in teacher education. Dr. Morsink's study focused on four "clusters of capabilities" identified by Reynolds et al. in A Common Body of Practice for Teachers: The Challenge of Public Law 94-142 to Teacher Education. Entitled Perspectives of an Ivory Tower Realist, the monograph summarized the experiences and insights of a teacher educator who returned to the classroom to test education's ability to respond to the challenges of individual differences in public schools.

We acknowledge with appreciation the grant from the United States Department of Education Office of Special Education and Rehabilitation Services which made the classroom experience, the monograph, and this handbook possible. One measure of the success of the experience may be found in the approval of a similar experience for two additional College of Education faculty members during the current year.

A group of faculty colleagues at the University of Kentucky prepared papers exploring the knowledge base associated with some of the instructional problems addressed in the project. Their efforts are summarized in a separate Dean's Grant publication, Toward a Research Base for the Least Restrictive Environment: A Collection of Papers.

The pages which follow delineate a set of methods and materials that elementary teachers could use in classrooms with mainstreamed mildly handicapped children. The strategies are designed to require a minimal amount of additional time and effort from the classroom teacher and are adapted to the regular program rather than to provision of special or revised curricula.

George Denemark
Dean, College of Education
Co-director, Dean's Grant Project
University of Kentucky

May, 1981

INTRODUCTION

This teacher's manual includes materials and descriptions of methods that were developed, implemented, and revised during the spring semester of 1980. At that time I took a leave of absence from the Chairmanship of the Department of Special Education at the University of Kentucky and returned to teach a regular third grade classroom in which mildly handicapped children were "mainstreamed."

There were twenty-four children in this classroom, ranging from seven to ten years of age. Thirteen were boys and eleven were girls; two children were black and twenty-two were white and they represented a wide range of socio-economic levels. The school had a high rate of enrollment changes, however, only one child entered and one withdrew from my classroom during the course of the semester. Three children in the group were currently labeled as educable mentally handicapped and placed in a resource room for part of the school day (2-3 hours per day). One child had been labeled as learning disabled and placed in an LD resource room the year before but was now working in the regular classroom full-time. One child was referred and tested for possible placement in a resource room for the learning disabled and/or supportive liaison services for the behaviorally disordered; the question had not been resolved by the semester's end. Two other children had been referred and tested previously for placement in special programs for the learning disabled or educable mentally retarded but had not met eligibility criteria. One child had a visual problem of neurological origin but did not presently require special services. Two children were receiving special services from a speech therapist, and three participated in a Title I Compensatory reading program (all five of these children were mentioned previously as having been tested or as also being included in other kinds of programs). Three other children came to the classroom for thirty minutes per day to work with me in a special reading

group which functioned 1 1/2 years below grade level. There were, then, eight children out of twenty-four with special problems, plus three others who came to the classroom to join the low group in remedial reading activities.

There were no student teachers, special assistants, or teacher's aides in this classroom. I completed all of the reports, attended all of the meetings, and fulfilled all of the duties of a regular classroom teacher. In addition, I taught a graduate/inservice course for the university and continued my involvement in two national committees. None of the children and only one of the parents knew that I was a university professor. My faculty colleagues did know that I was an ivory tower person, but they accepted, supported, and helped me anyway!

I had the benefit of a doctorate in special education, eleven years of prior regular/special class experience, and a personal accumulation of library books and special materials, plus access to consultation from school district and university colleagues. These advantages should be acknowledged. I also had the advantage of temporary placement which was long enough for susceptibility to childhood illness to occur, fatigue to set in, and realism to take hold, but not long enough for burnout to occur. The possibility of burnout over time should also be recognized.

A major purpose of this experience was to develop a set of methods and materials which could be used in classrooms by elementary teachers with mainstreamed mildly handicapped children. The materials included in this document have been used in this way and they have also met two additional criteria:

1) They require a minimum of special expertise, time and effort on the part of the teacher; and

2) They are designed as adaptations of the regular program rather than revisions of the adopted grade-level curriculum.

They can, then, be used either to help a "borderline" child cope more easily with the demands of the classroom or to supplement the special services provided

for the exceptional child. It should not be assumed that these kinds of adaptations can replace the special education programs required by some handicapped students.

Most of the materials were used by me in the third grade classroom described above. Some of them were developed and used by elementary teachers in other classrooms within the district and/or by graduate students in special education who implemented them in other regular elementary classes. The contributions of these persons are gratefully acknowledged, and their work is credited in the text of this document.

It should be noted that this manual contains "selected" methods and materials in four areas: classroom management, and teaching of reading, math, and written language. There was no attempt to test or provide all of the possible ways to help mildly handicapped children in regular classes, since there were limitations of time (one semester) and space (this document). It should not be assumed, necessarily, that the same things would be effective in other settings with different teachers and children, even at third grade level, since every case is unique. It is believed, however, that many of these techniques can be used easily and effectively by other teachers.

Because these materials were developed with assistance from the Bureau of Education for the Handicapped, they may be used and copied without permission.

The reader is referred to two other sources for further information on this topic:

1) A monograph for teacher educators, focusing on the needed changes in preservice training for regular elementary teachers, available from the University of Kentucky, College of Education, Dean's Grant Project, Lexington, Kentucky, 40506.

2) A series of modules for inservice education, focusing on methods for use with mildly handicapped children, available from the Child Service Demonstration Center, Bureau of Education for Exceptional Children, State Department of Education, Frankfort, Kentucky, 40601.

Catherine Morsink, Ed.D
May, 1981

ACKNOWLEDGEMENTS

The following persons have contributed to this project and their assistance is gratefully acknowledged:

Dean's Grant Project Staff

Dr. George Denemark, Dean
Dr. Elizabeth Nelli
Carol Chase Thomas
Ruby Russell
Mona Richards

Fayette County School System Personnel

Dr. Guy Potts, Superintendent
Walter Hall
Norman Osborne
Natalie Patterson
Jean Arnold

Cardinal Valley Elementary School Staff

Ron Beckett, Principal
Linda Price
Marsha Benton
Millie Cohen
Martha Wilkie
Mary Anne Pickelsimer
Susan Tebbs
Mildred Werner
Devon Roxberry
Susan Williams
Peggy Phillips
Gail Toye

TABLE OF CONTENTS

FOREWORD
George Denemark iii

INTRODUCTION v

ACKNOWLEDGEMENTS viii

Chapter One
MANAGING THE CLASSROOM LEARNING ENVIRONMENT 1

Chapter Two
TEACHING READING TO THE MAINSTREAMED SPECIAL CHILD 28

Chapter Three
TEACHING WRITTEN LANGUAGE SKILLS TO THE MAINSTREAMED SPECIAL CHILD 41

Chapter Four
TEACHING MATH TO THE MAINSTREAMED SPECIAL CHILD 61

CHAPTER ONE

MANAGING THE CLASSROOM LEARNING ENVIRONMENT

This chapter will present ideas about managing the classroom learning environment along three dimensions: preventative discipline, selected intervention strategies, and suggested educational reinforcers. The discussion is not intended to be comprehensive; instead, it features examples of selected practices which were implemented and found to be effective in this particular setting.

PREVENTATIVE DISCIPLINE

Many classroom management problems can be prevented if the teacher carefully engineers the physical environment, structures activities and materials for use, designs the daily schedule, and establishes rules clearly. Each of these aspects of preventative discipline will be presented separately and examples will be provided.

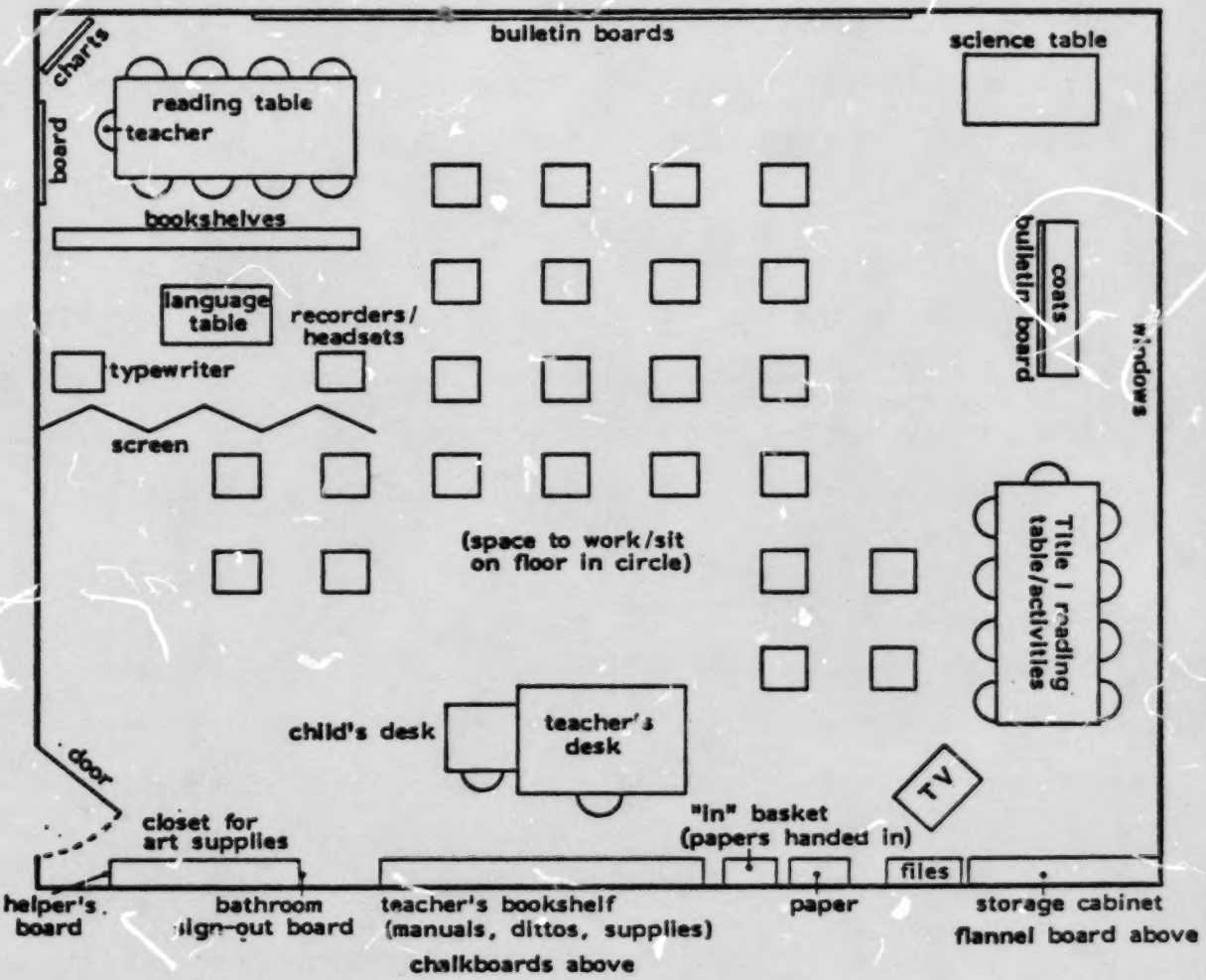
Engineering the Physical Environment

Two factors are of primary importance in engineering the physical environment of the classroom: the teacher's "eye view" and the separation of space. It is important for the teacher to be able to see where every child is and what everyone is doing at all times. This means that there must be a clear "eye view" not only from the teacher's desk, but also from the teacher's seat in the reading group and whatever other places he or she may be for certain periods of the day. The separation of space is an important consideration in traffic flow, in the provision of adequate "personal space" for each child, and in the location of study and activity areas.

The following diagram shows one plan for structuring the environment in a self-contained classroom, which includes a good teacher's "eye view" and adequate separation of space (see Figure 1).

FIGURE 1

FLOOR PLAN FOR SELF-CONTAINED ELEMENTARY CLASSROOM



The plan in Figure 1 is adequate for a one teacher/twenty-four-child self-contained traditional elementary classroom. It also permits a second teacher (Title 1 Compensatory Reading) to work with a small group of children on a directed reading lesson while the regular teacher works with others, and the remainder of the class completes seatwork independently. When the second reading teacher is not present, the reading table may be used for small group activities in science, social studies, art, etc.

The Figure 2 diagram shows a plan for structuring the environment in a team-taught complex with fifty children and two teachers. It also features good "eye-view" and separation of space (See Figure 2).

Structuring Activities and Materials

"Set-up" is important in any classroom; it is even more essential in the classroom with mainstreamed handicapped children. Many problems are prevented when things are ready to use and children understand how to use them. Some examples follow:

A. Science Experiment: Batteries and bulbs

Teacher #1: "You may choose three other people to work with. Get your materials, and try to discover something by using batteries and bulbs. If you need help, come to me."

Results: Everybody wants to work with Amy, and Sam--who needs help--is left alone. He roams around the room, grabbing Amy's materials. Amy yells at him. Seventeen other children swarm around the teacher, asking what they need and how they are supposed to do the activity. Noise, confusion, and disaster result due to lack of structured set-up.

Teacher #2: "Amy, I want you to work with Sam, Charles, and Janet at the back table. You will have 20 minutes to figure out how to make your bulb light. All of the materials you need are on this tray. I will

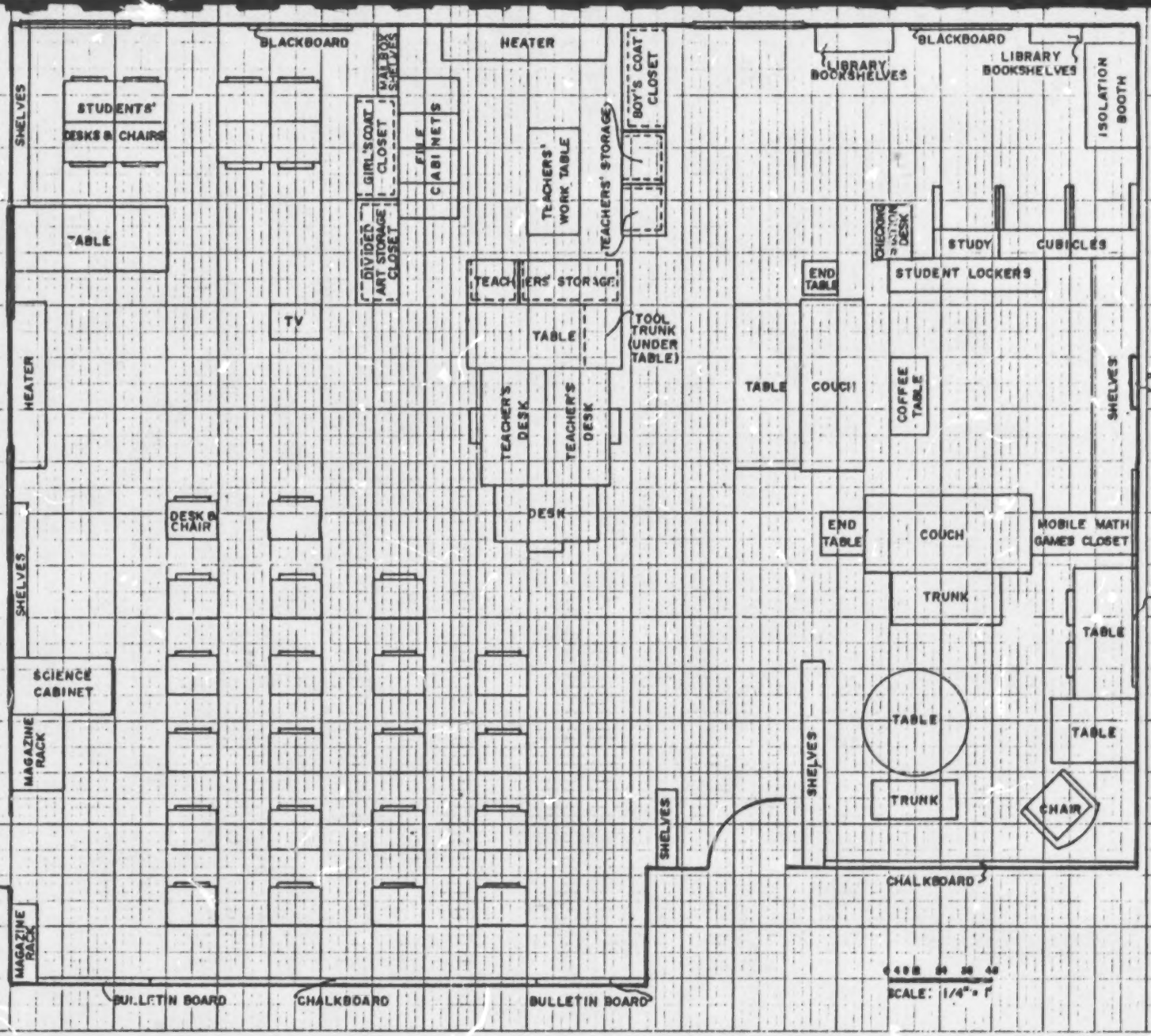


FIGURE 2

SUZANNE McCURRY

be walking around, looking for quiet team workers, thoughtful helpers, and careful thinkers. Sam, Amy, Charles, and Janet may go to the back table now. After I've told all the groups where to work, I'll choose the quietest person in each group to come and get your tray of materials."

Results: No problems over whom to work with or where to go; group movement is structured. Materials are organized in advance, and both academic and behavioral expectations are stated clearly. Preventative discipline is evident in the structured set-up.

B. Math Activity: Measuring objects

Teacher #1: "Here is a metric ruler for each person." (Hands out rulers.) "Now listen while I tell you what to do. I want you to measure the top of your desk, the length of your pencil, and one of your books. Then write down how long each thing is in centimeters."

Results: As soon as the children receive the rulers, they begin to measure, rather than listen to directions. Or--equally possible--they do even more creative things with the rulers, such as balancing them on their noses or having sword fights. Math lesson? Was this a math lesson?

Teacher #2: (At board.) "On your math paper, copy this from the board. (Points to: 1. desk; 2. pencil; 3. book.) Now watch me. This is a metric ruler. (Holds up ruler.) It can measure in centimeters. (Point) I want to see how long my desk is, so I'll choose a good listener to help me measure it, and to write the answer after 'number one' (desk) on the board." (Chooses a child to measure and write. Continues the demonstration with the pencil and book, explaining that each child is to measure his or her own desk, pencil and book, and to write answers on paper. Then the rulers are passed out!)

Results: The students are good listeners and use the materials correctly with a minimum of hassle. The timing in distributing materials makes the difference.

C. Language Arts: Use of tape recorder, typewriter

Teacher #1: "We have two special things for you to use today. This is a tape recorder on which you can play a tape to help you with your spelling assignment. You must use it with this headset so you don't disturb the rest of the class. You may use it only after your other work is finished. Here's how you make it work. (Demonstrate play, rewind, etc.) It has a microphone, but you may not record on it, Okay? This is a typewriter for typing the stories you have written. Here's how you put in the paper and this is how you make it go to the next line. (Demonstrate) Take turns and use it only after your work is finished. Any questions?"

Results: Children will use the equipment before their work is finished. Since the directions were complex, many of the children won't remember them. They will record songs and four-letter words, and type random jumbles of letters. Also, they will probably argue over turns and break both pieces of equipment within a week.

Teacher #2: "Today I'm going to let some of you learn to use the tape recorder to help you with your spelling. Marvin will be your student teacher because he's good at using tape recorders. He knows how to work them and how to use them right. He will sit right beside the recorder and show you just what to do. I've chosen Jimmy, Allan, Sarah, and Julie to use the tape today because they finished all their work on time yesterday. Each person's 'tape time' is written on the board. Tomorrow, I'll choose four more learners and a new student teacher to use the recorder. Tomorrow the student teacher will be one of the four people who was most careful today. All of you will have a turn to show that you can use a tape recorder correctly sometime this week." (Then set up a system to monitor who uses it and when in the future. Note: The same kind of procedure would be set up another week to introduce the typewriter.

A completed, corrected handwritten story could be the admission ticket for the typewriter.)

Results: Instructions on operating equipment are given individually, under carefully controlled conditions. Students learn that use of equipment is contingent upon completion of work, and continued use depends on careful handling.

D. Seatwork: Assignments for mainstreamed students

Teacher #1: "Bobby, when you hand out the ditto sheets for math today, don't give one to the kids who went to special classes yesterday. I gave them the same work the rest of you had, but it was too hard for them. They'll just have to find something else to do while they wait to go to special class."

Results: Mainstreamed students have no accountability in regular classrooms. They don't feel a part of the group and instead identify only with their special class peers. They are also likely to be disruptive during this time period since they are left to their own devices. And other students are given the impression that they aren't capable of doing "real work".

Teacher #2: "Bobby, the ditto sheets for Sam and Barney are in these colored folders with their names on the outside." (Teacher has included only portions of worksheet which are appropriate for special children, modifying them by cut-and-paste or with colored markers. Teacher circulates among entire class during first 10-15 minutes of seatwork time, spending a moment with each special child to see if s/he understands task. Special children are expected to complete their work and to hand it in like their other classmates.)

Results: Teacher communicates acceptance of differences and shows a willingness to give help without calling attention to the need for it. Special students are perceived by themselves and the others in the group as equal in terms of accountability.

Each of the above illustrates how a minor modification in preparation, use of materials, or the implementation of activities can prevent many of the discipline problems which could otherwise occur in the mainstream classroom.

Designing The Daily Schedule

There are a number of times during the school day when problems are likely to arise as a result of the schedule. These include the beginning and end of the day, transition times when students arrive or leave the room, or times between one activity and another. Many problems can be prevented by the teacher's careful structuring of transition times and by the alternation of quiet with more active periods. The schedule in Figure 3 illustrates these considerations (See Figure 3).

It should be emphasized that the schedule is predetermined, to a degree, by other whole-school schedules, such as those for P.E., music, and lunch. The teacher must always work around these constraints. Note how in this schedule quiet study and activities, group and individual work are alternated. More activities are scheduled in the afternoon, and out-of-room transitions are always followed by "go-right-to-your-seat" expectations. Since this was a third grade level classroom, the short time blocks are a response to limited attention spans. Note, also, the times when individual help can be given by the teacher: 8:15-9:00, 12:15-12:30, plus part of each math and science/social studies period. A student helper (child) is available at other times to prevent the problem of children having to wait too long for needed assistance.

There is a structure for lining up to get ready to leave the room each time the class prepares to leave the room. The best worker during the previous time

FIGURE 3

SAMPLE DAILY SCHEDULE

8:15	Pledge, attendance, lunch count, etc.
8:30	Hand out seatwork (to be done independently while not in reading groups) Group instructions are provided if appropriate. (For example, spelling and language assignments are discussed by the whole group. The teacher tapes this discussion, including student responses, so that students can play tapes later if they need help).
9:00	Reading groups 1 (Title I teacher) and 2 (regular teacher); seatwork for reading group 3 "student helper" (child) sits at desk next to teacher's all morning to answer routine questions and to staple together seatwork when it is completed, checking off each child's name on "work finished" list.
9:30	Reading group 1; seatwork for groups 2 and 3
10:00	Line up (this is structured as described); Recess
10:25	Snack and current events sharing
10:40	Reading group 3; seatwork for groups 1 and 2
11:10	P.E. or music
11:45	Line up (structured); Lunch
12:15	"Quiet time" to finish morning work. Teacher gives individual help or lets students share library books for tickets. (Each "book report" given orally to the teacher is worth one ticket; 10 tickets may be exchanged for a paperback book).
12:30	Math - usually a demonstration or activity followed by small group or independent work
1:00	Science, social studies, library, or art - usually an activity and/or discussion time; may view a related TV program or film; clean-up before recess
1:35	Line up (structured); Recess
2:00	Story, followed by presentation of special awards for good workers (applause, stickers, tickets)
2:25	Line up (structured); Dismissal

period is chosen as line leader. The students who have been on task then follow the designated leader. There is no rush or hassle over places in line.

Classroom Rules

Many discipline problems can also be prevented by the existence of a minimal set of rules--enforceable rules stated clearly and positively and designed jointly by the students and the teacher. Figure 4 shows a list of rules for a third grade classroom that were generated by the children in a social studies discussion.

FIGURE 4

CLASS RULES

1. Respect the flag
2. Keep room clean
3. Be friendly
4. Help others
5. In fire alarm, walk calmly
6. If someone fails, be a friend
7. Obey teachers
8. Respect others

Summary

For younger children the statement of rules is not enough. They also need to see the rule modeled by another child: "Jackie, please show us the right way to carry your chair from the reading table back to your desk." The teacher must then reinforce this desired behavior. ("You did that just right--you picked it up slowly, and watched carefully so you didn't bump into anything. And you put it down so quietly!")

Preventative discipline is important for all students. It is even more vital for children who have special learning needs. Its use can minimize situations which involve teacher intervention or confrontation.

SELECTED INTERVENTION STRATEGIES

In the following discussion, selected strategies for dealing with management problems that occur frequently in the elementary mainstreamed classroom will be presented. This section is divided into four areas: special problems in individual work, special problems in group work, how to be in two places at once, and a sample of a whole-class management strategy. As in the discussion of preventative discipline, there is no attempt to be comprehensive, nor to illustrate techniques which are based on a single theory of management. This is simply a description of some intervention strategies which were effective in this particular setting.

Special Problems In Individual Work

When working--even briefly--with exceptional children on a one-to-one basis, teachers need to be aware of some unique problems resulting from the freer atmosphere and the joy of "owning an adult" for awhile. It will be helpful for the teacher to consider some of these problems and possible solutions. Examples include:

Problem	Possible Solutions
Off-task conversation	
Child says, "Guess what I did last night . . . ."	--Ignore: Keep teaching and say, "We'll talk about that later." --Use conversation as reward for work completion. ("If you get all of these right, we'll just sit and talk for five minutes.")
Over dependence on teacher	
Child begs you to stay and help more.	--Use student tutor rather than adult. --Set a timer (egg timer, for example) to signal when you must leave. --Reduce complexity of assignment if child really can't do any of it alone. --Fade out attention by saying, "You do this one by yourself. I'll be back in one minute to see if you got it right." Praise when you return, then ask child to do <u>two</u> while you're gone, etc.

Problem	Possible Solutions
Careless performance	
Repeated errors (when child can do better)	--Say, "I'll be back to help you when I see that you're really trying." --Give an educational reward for accuracy. For example, let child check math problems with calculator after you see that performance has improved. --If this happens repeatedly, "charge" child for it. ("For every one you do wrong, you have to do an extra one--during play time.")
Poor recall	--Start new task with review of old material. This can be silent review as child waits for help. --Recall difficulties may indicate that the material is being presented too rapidly. Slow down presentation speed and give more opportunities for practice. --Present a challenge. ("Those problems we did yesterday were really hard. I'll bet you forgot how to do them . . . .")

Special Problems in Group Work

Mildly handicapped children may also present special problems when they work with others in small groups. Again, anticipating these problems may help the teacher to intervene before their existence becomes disruptive to the group. Some of these problems and possible solutions are presented below.

Problem	Possible Solutions
Inattention to instructions	--Refuse to repeat directions. (Do this consistently.) --Make instructions brief, clear, and interactive. (Children do something in response to instruction, such as work the first problem together and check.) --Praise/reward good listeners. ("I like the way John is watching the board"; "I could tell that Sherry listened carefully because she knew what to do. I'm going to let her hold the book this time.")
Some dominate, others fail to get turns	--Go around the group in a predictable order so everyone gets a turn. Sometimes go backwards or start in middle so they don't anticipate their turn and listen only then. --Ask question first, then state name of child who is to answer. You can vary question level/difficulty according to child.

Problem	Possible Solutions
	--Pause between statement of question and time for response to allow thinking time and to prevent impulsive answers. (Set up a praise or point system to reward those who wait and penalize those who blurt out.)
Some finish group work too early	--Praise/reward accuracy rather than speed. --Have an alternate assignment for early finishers. (Print it on board or hand them an additional task while they are in the group.) --Set up a "checking" chain, allowing each child who gets 100% to use work as answer key to check the work of the next one finished.
Dealing with disruption	--Ignore if not too disruptive or dangerous. --Re-state rules: "I'll call on people when they wait quietly and raise their hands." (Then, be consistent.) -- Give choice: "You may sit in your chair or leave the group." (Be ready for a confrontation if you do this.) --Praise/reward those who do the right thing: "Charles, you're a superstar because Tom hit you and you didn't hit him back. That's great!"

Being in Two Places at Once

There are many times when a teacher must work with an individual or small group while the rest of the class works without assistance. Working without assistance is harder for some children than for others. Here are some of the ways a teacher can intervene when problems arise at these times.

1) State a modified "I message" (Gordon, 1974)*. "I need to work with Julie for five minutes without any interruptions." If someone interrupts say, "I'm sorry, this is Julie's time."

2) Circulate among the larger group before and after sitting down with the individual(s) and/or provide a student assistant when you can't answer questions.

3) While sitting with the small group or individual, give periodic recognition to good workers in larger group. "Row five is working so quietly while I'm in the reading group. Thank you, row five."

---

*Gordon, T. TET: Teacher Effectiveness Training. New York: Peter H. Wyden Pub., 1974.

4) While staying with the small group or individual, send nonverbal signals to individuals in larger group (e.g., frowns, snarls, shoot them with imaginary finger guns, thumbs down, etc.--for bad guys; okay signs, smiles, claps, draw imaginary halo over head, victory signs, "give five," etc.--for good guys).

5) If it is absolutely essential to leave the small group and go to answer a question, give the group a short task to complete in your absence. ("I'll be back in two minutes. I want you to read page . . . . and find out what happened when . . . ." Then start the discussion with, "Susan really worked hard while I was gone. I'm proud of her for being able to go ahead without the teacher. Susan, you get to read the part that answers the question."

A Sample Whole-Group Management Strategy

The way a teacher intervenes in the management of the whole classroom not only determines the classrooms atmosphere it also affects each student's self-image and the teacher's satisfaction with his/her job. For these reasons it is important that the management strategy be positive and constructive, conducive to improving each student's competence and confidence. It is also essential for the plan to be practical (not impossibly demanding of time and money) and that it results in improved child behavior in settings beyond the classroom. The plan described below meets those criteria. It is the end product of a whole semester's implementation and appears here in its revised form.

Step one: Decide how you'd like the class to behave. (Listed in priority order.)

1. Each child working hard to do his/her best, expressing pride in accomplishments, and trying again when things were hard.
2. Each child expressing "congratulations" to others when they did something well and being supportive (or at least silent) when another experienced difficulty.

3. Every child attending school every day (except when ill). All children saying they liked being at school and believing that their teacher was glad they were there.

4. All of the students demonstrating mastery, by the end of the year, of the learning objectives that were appropriate for their functioning levels.

5. At least 90% of students coming in from out-of-room and from within-room transitions and going directly to their seats to begin work quietly.

6. All of the students "on task" (working quietly on tasks assigned for that time period) at least 80% of time.

7. Nobody fighting, cussing, crying, or calling people names, yelling or running in the halls.

Step two: Determine what turns these kids on*

1. Find out what constraints are imposed by the system (no corporal punishment or candy in school, for instance) and by the limits of time and money.

2. Find out all you can about the interest and probable motivators for kids of similar ages and backgrounds.

3. Ask other teachers what works.

4. Ask the kids! Design a simple questionnaire and/or interview the class members for five minutes each to find out what they like best. (For the students in this class, reinforcers were individual attention, being first in line, and doing "fun" things in school.)

5. Decide how to use what turns them on to get them to behave in the way outlined in step one.

Step three: Decide where to start.

In this case, it was the goal: "At least 90% of students in from out-of-room and from within-room transitions and going directly to their seats to begin

---

*Turn-ons (Suggested Educational Reinforcers) are described in more detail in the last section of this chapter.

work quietly." This goal became the first priority in terms of a logical (and attainable) starting point.

Step four: Design a simple measurement system that will let you know where to begin, how much progress you're making, and when you've arrived at your goal!

In this case, the recording sheet was a seating chart on which the teacher could make a check mark in the box (desk) of any child who did not go directly and quietly to his/her seat during the transition periods (See Figure 5). It was quick and easy to convert this data to a percentage, indicating what proportion of the students were already doing what was expected. Data collection began with the four transitions per day when students returned from being out of the classroom (starting bell, morning recess, lunch, afternoon recess), then progressed to the within-class transitions such as reading group changes.

Step five: After you've collected information on where you are now, tell the students what you want them to do and let them know (by actions) how their responses will be rewarded.

Students were told they should go straight to their seats and sit down quietly when they came back to the room. They were shown the seating chart and told that one of those who did the right thing would be drawn to be first in line the next time the class left the room. The boxes of those doing the wrong thing were checked, but checks were not announced. (See Figure 6). Instead, the names of children who did the right thing were announced to the group:

> "Sharon, Jerry, Marsh, Don and Betsy came right in and sat down quietly so I didn't check their boxes. I'll draw one of them to be first in line when we go to lunch." All five names were put into a box, and the one drawn was line leader. The others were directly behind. The line leader was different each time the class left the room, to allow more children to be rewarded more frequently.

FIGURE 5

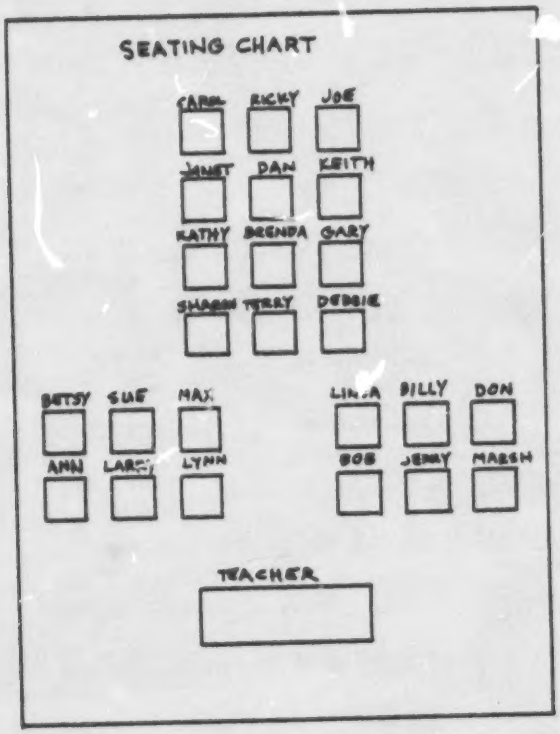
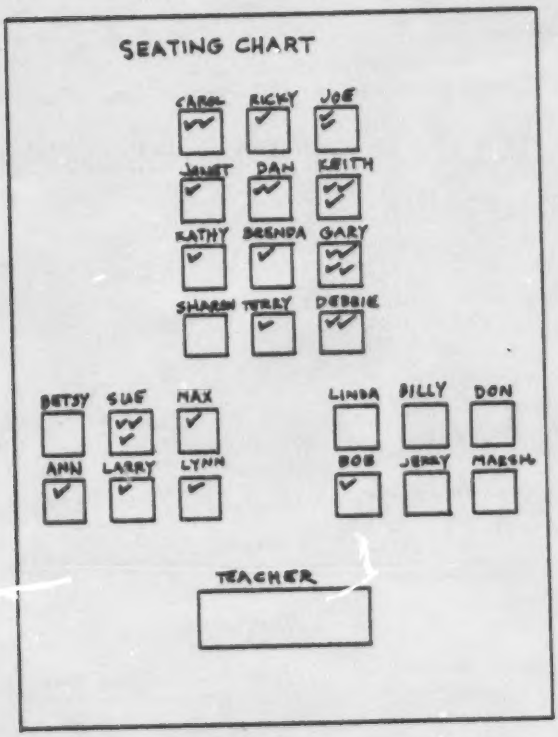


FIGURE 6



When all students were going directly to their seats after transitions 90% of the time, the goal was raised--now the objective was for them to maintain an "empty box" (no check marks for being off-task) for a given period of in-class work time. This started with half-hour blocks, then increased through an hour to a half day and finally to all day). The increased expectations were implemented gradually, over about a four-week period. Each time the students were told what the "rules" were, and each time those who did the right thing were given some kind of educational reward. (See the last part of this chapter for examples of rewards.) Always, those doing the right thing were recognized verbally by the teacher, i.e., "Linda and Billy are working so quietly that they are not disturbing anyone. Thank you Linda and Billy." When it reached the point that saying the names of every good child would take too long, verbal recognition was given systematically by sections or rows in the room (i.e., announce everyone doing the right thing in row 1 at 9:00, row 2 at 9:15, etc., but keep checking--without comment--all who do the wrong thing each time).

Step six: Incorporate a way to keep the behavior going by checking it systematically but less frequently.

In this case, the teacher used a small (pocket size) timer, which could be set for any interval up to 60 minutes. When the time was up, it would buzz. The students were told that the teacher would try to "catch them being good" each time the buzzer went off. If she caught them each time (first for shorter periods, then all day), they would have an "empty box"--no checks. The empty box then became the prerequisite for all other rewards.

Step seven: Add other goals to existing system, and give rewards related to behaviors.

1. To encourage children to congratulate each other for accomplishments

and to help them ignore criticism, the "superstar" system was initiated. It was introduced like this:

> "I'm going to look for people who say nice things to others, and who can ignore it when somebody says something mean to them. I'll put a star in your box each time you do one of those things, and the next day I'll write the names of superstars on the board. Superstars can do special things when their work is finished. They can play learning games, do extra science experiments, paint pictures, listen to records, work in learning centers, and be student helpers. I've picked two superstars already. One is Amy because she said to Susan, 'Hey, that's really nice writing. I bet you get an E!' The other superstar is Jerry because I heard someone call Jerry a name, and Jerry just ignored it and kept right on working."

Superstars were awarded selectively for many different things from that time on, and they never lost their appeal. A superstar was given, for example, to the perfectionist who missed a word on the spelling test and--for the first time--didn't cry; stars were given to the whole class the day another third grade beat them in a multiplication contest (109 to 62!) and they applauded the winners!

2. To reward academic achievement, different kinds of awards were given. These are just a few examples:

--paper ribbons for mastery of math facts

--pencils for all E's in handwriting for a week

--small metric rulers for passing the metric competency test

--cartoon character stickers for any super good paper (good enough to make the bulletin board)

--Each week grade averages were sent home. The child with all E's and an empty box was chosen to be the "checker"--the one sitting right beside the teacher--who checked off names as others handed in their work. (This was a real honor.)

Step eight: Keep changing the rewards so they don't lose their appeal, but don't ever stop telling kids when they do well.

"Wow, you remembered to carry in every problem you added today!"

"This handwriting is much better--all of your letters are on the line!"

"When Larry hit you, I thought you'd hit him back, but you didn't. You kept your cool really well!"

Step nine: Add an accountability component to the system whenever necessary.

In this case, three checks (strikes) made an "out." If a child struck out, he or she would have to sit alone, stay in at recess, miss something special, etc., depending on the reason for the strikes. Three outs meant they would miss a class trip or something equally awful.

Step ten: Keep modifying the system based on how it works in your classroom for this particular group of students.

Observations and data tell you what, how, and when to change. It won't work the same way for each teacher or each group. A back-to-the-drawing-board attitude is the only thing you must have to make it work anywhere.

SUGGESTED EDUCATIONAL REINFORCERS

Teachers should not be candy dispensers. Nor should they have to invest in expensive items to "pay off" students. That's not what reinforcement is about. But children, like adults, are more willing to do things for which there is some incentive. The ultimate incentive, of course, is for the child to feel that he or she is learning and growing. It may take something a little closer and more tangible to get this process started, especially for children who have not been accustomed to success and recognition. Here are some of the things which the third graders in this classroom found reinforcing:

General Privileges

--being first in line

--getting to sit by the teacher

--being the first to choose a game to play inside at recess on a rainy day

--being chosen to pass out or collect papers

--getting to spend five minutes in a learning center

--being chosen to wash the boards

--being chosen to hand out lunch or milk tickets

--being chosen as the "secretary," who takes lunch count

--being the "treasurer," who loans out lunch money and writes IOU's

--being the "checker," who sits near the teacher's desk, checks off names of those who finish work, and staples the papers together

--acting as the "student helper" to show somebody who was absent what the assignments were

--using your 100% right paper as an answer key to correct someone else's paper

--sitting on the floor or at a big table, under a table or at the teacher's desk to work or read for a short time

--talking quietly to a friend for five minutes in a private corner

--being able to use paints or magic markers for art

--listening to a record or tape story with the headset on

Special Reinforcers for Good Reading

--getting a "ticket" (small red squares) to put on the child's Readometer after he or she finishes a book (books read then look like a mercury column on a thermometer)

--finishing a book and being able to start a harder book

--being able to record oral reading on tape

--being chosen to read to a younger child

--getting chosen to use the stopwatch to time reading

--being able to read a play to another class

--holding the teacher's book in reading-group

--playing a skill game

--being able to examine a real object and/or share it with another class after reading about it (i.e., seahorse, humming-bird's nest, rattlesnake skin, shark's teeth, etc.)

Special Reinforcers for Math

--being chosen to use the calculator to change fraction scores (number correct/total) to percentages for recording grades in teacher's grade book

--being able to use colored chalk (especially red) to do math on the board

--being picked to use concrete objects (blocks, scales, containers) in learning center for doing math assignments

--being chosen to collect and total money for class book order

--being able to "act out" thinking problems before writing answers

--totalling the height/weight for the whole class, then using the calculator to check work

--being allowed to work problems with a friend

--doing math worksheets with color mysteries or alphabet code mysteries

--winning a small ruler by passing test on metric measurement

--doing "brain teasers" (Question: Which would you rather have--4 half-liters of Coke or 3 liters of Coke?)

Special Reinforcers for Science/Social Studies

--listening to a tape about the topic the child is studying

--doing a self-designed experiment independently and getting to tell the class about it

--being able to take an experiment or project home to show

--making "real" flags on cloth and ironing them

--having work chosen for the bulletin board

--designing a bulletin board display

--winning a small paper flag because the child was a super citizen

--constructing a city using buildings the child designed

Special Reinforcers for Language Arts

--writing in new languages (Spanish, braille codes)

--doing learning centers activities, such as "Cool Stuff" (to be described in chapter on written language)

--writing creative stories or poems

--being able to type a story or poem on the typewriter

--being a "special speller" who gets to study long, hard words

--being chosen to sit at the teacher's desk and operate the tape recorder on which the spelling test is dictated

--working on an art or craft activity independently, just by being able to read and follow the directions

--winning a Snoopy pencil for getting E's in handwriting everyday for a whole week

OTHER REINFORCERS SUGGESTED BY COLLEAGUES IN FAYETTE COUNTY SCHOOLS

Ginny Liddle (Garden Springs Elementary School):

--Cut pictures out of workbooks and give the pictures to the students for rewards

--Allow two students to pull a wishbone. (All students' names are put in a box and two are drawn.)

Christy Riffle (University of Kentucky graduate student):

--Cut out a monkey with mouth open. Those who do good work "feed" the monkey bananas with their names on them. At the end of the week the child with the most bananas wins a prize

Susan Henry (Northern Elementary School):

--If the group collects eight reinforcers from adults, they earn extra recess, party, etc.

Sharon Ledford (Maxwell Elementary School):

--Give each child a "star card." Stars are awarded for good work and can be traded in for prizes.

--Give paper money for good behavior. The money can later be used to buy items from the classroom store.

Trish Mayfield and Suzy McNamara (Meadowthorpe Elementary School):

--Awarding ten minutes of free time for a perfect paper. Then increase requirements to ten minutes for three perfect papers. Corrected papers earn 1/2 points only. Free time provided on Fridays.

Mary Lundgren (Northern Elementary School):

--Set up a grab box of coupons from local fast food places. After children have earned required points they are allowed to pick a coupon. If they don't want that particular coupon they can put it back, but they may not draw another until points are earned again.

GUIDELINES FOR MANAGING CHILD BEHAVIOR*

The following guidelines are illustrations of how problem situations can be handled: they are not, however, intended as an exhaustive set of all the behavior management techniques which could, and should, be attempted. The first three guidelines reiterate the need for preventative techniques in that they suggest how the teacher can structure the classroom to minimize the probability of a crisis situation occurring. The guidelines relating to handling a crisis are intended to provide the teacher with a framework for making on-the-spot decisions.

1. Set rules that are clear and fair. Negotiate with students to establish rules.
2. Let the pupils know what the rules are. (They should be positively stated.) Post if you like.
3. Consistently reinforce children who follow the rules.
4. If a rule is broken or child's behavior is inappropriate

   and

   a. The behavior is not disruptive or dangerous to the child or others
      1) Ignore--turn your back, avoid eye contact, etc. At first you may tell the offender when you will attend (e.g., "Steve, I'll call on you when you are quiet and in your seat.")
      2) Move in on a child who is engaging in an appropriate behavior (ideally, one near the offender, or a friend of the offender)--give reinforcement (praise, points, etc.) e.g., "Tim, I like the way you're working." (Optional: give Tim a point.)
      3) As soon as the offender behaves appropriately (e.g., gets back on task) move in with attention, praise, points, etc. Be sure you indicate what the child is doing to earn it.

      or

---

*By Dr. C. Michael Nelson, Professor, Department of Special Education, University of Kentucky

b. The behavior is disruptive or dangerous, or behavior persists after interventions in Step a.

1) Confront the offender, give him/her the choice of returning to task and staying with group OR taking a voluntary timeout in the classroom (e.g., "Gary, you may go back to work or take a five minute timeout in the corner to get yourself under control.")

(a) Confront immediately. Don't wait until the pupil is out of control.

(b) Give the child the choice. Allow him/her the opportunity to exercise self-control first.

(c) Tell the child which rule s/he broke. If necessary, repeat yourself, but <u>don't</u> nag, argue, or do anything more than tell him/her the facts and options <u>once</u>. If s/he acts like s/he didn't hear or understand, proceed to the next step.

2) If the child refuses to decide, continues his/her inappropriate behavior, or is disruptive during classroom timeout:

(a) Ignore the misbehavior, if possible. Let him/her know the time won't start until s/he is exhibiting appropriate timeout behavior (standing or sitting quietly).

(b) Set a specified time (no more than five minutes) for timeout. Allow the student to come back to the group and try again if s/he is quiet for the timeout period. Do <u>not</u> let timeout go on for more than 15 minutes or impose timeout long after the misbehavior has occurred.

3) If more than one child is involved in any inappropriate activity:

(a) Separate the children as quickly as possible. Use different corners of the classroom or a vacant classroom for timeout.

(b) Once separated apply the procedures outlined above on an individual basis. Gear the intervention to the child's behavior after s/he is separated from the others. Don't necessarily treat everyone alike.

5. Rules for implementation
   a. Children should be told the entire procedure. They should be well aware of the rules and consequences for breaking them before problems arise.
   b. Apply these procedures consistently. If you can't follow the rules, how do you expect the children to learn them?
   c. Keep careful records of timeouts and other penalties. If something isn't working after a fair trial, go to something else.
6. Praise, praise, praise
   a. Don't get caught up in a lot of negative behavior yourself. Usually the majority of the students will be behaving appropriately. Give them your attention; praise them by specifically stating what behavior you're pleased with.

CHAPTER TWO

TEACHING READING TO THE MAINSTREAMED SPECIAL CHILD

These activities are intended for use with mildly handicapped (learning disabled, emotionally disturbed, educable mentally handicapped) elementary students who receive all or part of their reading instruction from the teacher in the regular classroom. They have also been used with eight to ten-year-old children who were reading at second grade level or below, but who weren't - and shouldn't be - labeled as handicapped.

The availability of special services and materials for reading instruction may vary from one school to another, and from one time period to another. Supportive services are often available, however, from special education teachers, remedial reading teachers, diagnosticians, liaison teachers, speech therapists, counselors, district-level consultants, etc. The classroom teacher should not feel a total responsibility for the special child's reading program; neither should s/he be viewed as incapable of providing reading instruction for this child. In a total service plan, all members of the professional team share responsibility for teaching the child with learning difficulties. The classroom teacher is an essential member of the team with a grade-level perspective and subject matter expertise.

There are a number of things which need to be done for the child who functions a year or more below grade level in reading. These include placing the child in a reading book at instructional level, designing lesson plans, providing appropriate instruction, and measuring progress.

Placing Child in Book at Instructional Level

Reading instruction using materials which are too easy will result in boredom; those which are too difficult will frustrate the exceptional learner. The level of the reader in which the child is placed for instruction should be the one in which s/he can recognize approximately 95% of the words while

comprehending at least 75% of what has been read. An informal reading inventory can be used to determine an appropriate instructional level.

The most important level in the Informal Reading Inventory is:

1) The instructional level - at which the student should be grouped for reading instruction.

Word recognition 95 - 98% Comprehension 75 - 89%

Two other levels can also be determined. They are related to the instructional level:

2) The independent level - the level of easier books which the student can read without teacher assistance.

Word recognition 99% or better Comprehension 90% or better

3) The frustration level - the level of harder books which the student should not be asked to read.

Word recognition 90% or less Comprehension 50% or less

For the child with reading difficulty, an oral reading test is a necessary supplement to the silent reading test. Administration of this test allows the teacher to observe separate parts of the child's reading skill. The IRI is used individually with those students who are reading well below grade level in the intermediate grades, junior high or high school.

The traditional IRI consists of stories cut from old basal readers at several difficulty levels. The child reads the stories aloud while the teacher marks the errors and records answers to questions on his/her copy of the text.

Further information on the IRI can be found in Johnson, M., & Kress, R. IRI's, Newark, Deleware: International Reading Association, 1965, or in a module from Kentucky's Department of Education, Bureau of Education for Exceptional Children, Informal Reading Assessment: An Instructional Module for Inservice Training. Frankfort, Kentucky 1979. Also, informal reading inventories based on the reading series adopted by the district may often be obtained.

Regardless of what else is included in this child's reading program, it is important that s/he be placed at least part-time in a basal reader at instructional level, since the basal presents a balanced approach to reading instruction and is the "least restrictive" material available (most nearly like the regular instructional program). The basal may be a special reader with high interest/low vocabulary in cases where that seems more appropriate than the basal used in most classes within the district.*

PROVIDING APPROPRIATE INSTRUCTION FOR SPECIFIC STRENGTHS AND WEAKNESSES

For most children, teachers may use the end-of-magazine tests from the district's basal reading series, plus informal daily observations to pinpoint strengths and weaknesses. These tests and observations will help the teacher to determine whether a student has: 1) an overall lower level of development, 2) good skills but poor motivation, 3) a specific weakness in word recognition, or 4) a specific weakness in comprehension. In the first case, the child's program should follow the total basal program at the instructional level. When motivation is the problem, high interest/low vocabulary materials may be used.** When there is a specific problem in word recognition or in comprehension, the teacher may want to omit some of the skills suggested in the teacher's manual (especially those the student has already mastered) in order to focus on the skills in which the child is weak.

General Guidelines

There are three guidelines to follow when remediating reading deficits in this group of children. These guidelines, based on the Spring 1980 regular classroom experience, plus two studies conducted earlier in the school district (Morsink, 1974; Morsink and Otto, 1977) are:

---

*The reading series used in this school district was Houghton-Mifflin, 1979.

**See annotated list of high interest/low vocabulary books at the end of this chapter.

1. Don't try to present too many skills or concepts at once. Teach one skill at a time, teach it thoroughly both in isolation and in context, and test for mastery before teaching the next skill. For this group of learners, just "introducing" a skill may be worse than not teaching it at all, since partial learning of several skills at once may result in confusion about all skills. That means you might need to omit some of the skills in the teacher's manual and focus on one new skill at a time, testing for mastery before going on.

2. Provide direct instruction to these students. Sit down and teach/involve them in a reading group rather than just handing out worksheets or "listening to them read" out loud. This means that you should have a clear idea of what you want them to learn in each lesson, tell them what it is, and show them how to do it before you require them to show you they can do it. The teacher's manual is helpful here, but only when used selectively. Use your reading group time selectively, also. If you have thirty minutes, don't use half of the time listening to children read aloud "round robin" style--this is testing, not teaching. (More productive ways to measure progress are presented in the final section of this chapter.) Use your precious teaching time with slow learners for direct instruction.

3. Find a hundred different ways for these children to practice each skill they learn. Use all of the basal's suggested activities to teach the target skills (the ones this group or child hasn't mastered). Use the charts, the suggested activities in the teacher's reference book, the ditto sheets and games, the reassessment tests, and any other related activities you can find. Assign a workbook page when it matches the skill you've just taught. If the skill area is word recognition, special education teachers in your school will be able to loan you related games and worksheets from the DELTA kit (Morsink, 1977)* to use in your classroom.

---

*Morsink, C. (Ed.), Delta: A design for word attack growth. Tulsa, OK: Educational Development Corporation, 1977.

And don't forget commercial or teacher-made games. When they focus directly on the target skill, games are just as effective as books or worksheets--in some cases better, since the elements of chance and competition may increase the student's attention to/involvement in the task.

Sample Lessons: Word Recognition Skills*

Sample A (Suggested by Virginia Liddle, Garden Springs Elementary School):

For students unable to read basic preprimer sight words or understand sound-to-letter correspondence, utilization of available supplementary workbooks and peer tutors may be beneficial. The Sullivan Programmed Reading series, for example introduces new sounds and words in a very systematic manner. The teacher could spend a few minutes working with the student with reading problems on new sounds as they are presented, then choose another child to listen to his/her classmate read aloud. The tutor could also record answers or make note of errors to share with the teacher. This enables the teacher to work with other groups and the students with reading difficulty to receive individual help. (Children who are weak in phonic skills may be chosen to be the tutors if the teacher feels that their skills would be strengthened by the extra practice.)

Sample B (Suggested by Mary Lundgren, Northern Elementary School):

The following is an example of a structured lesson plan designed for a student experiencing difficulty in sounding out words and blending sounds to form words.

Lesson Plans

Goal: Given a word containing a single vowel, the student associates that vowel with the sound it most commonly stands for. (Goals and objectives are taken from Houghton Mifflin, Honeycombs.)

*Others may be found in the DELTA kit. (Additional suggestions for severe problems or nonreaders are located in Appendix A of this manual.)

Objective 1: Given 10 words with phonograms (ad, at, an, ack) the student will read them orally with 90% accuracy.

Activities: 1) Short vowel story to introduce sound

2) Worksheet--student traces word as teacher pronounces word, then writes the word himself and says it

3) Worksheet with stimulus words, student underlines word pronounced by teacher, reads words after completing worksheet

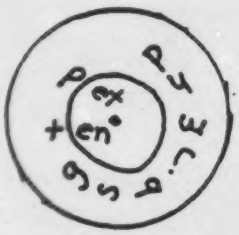
4) Honeycomb Reassessment test 31.

Evaluation: Assessment was made by having student read stimulus words on worksheets and completing the reassessment test independently.

Objective 2: Given 10 words with phonograms (et, en) the student will read them orally with 90% accuracy.

Activities: 1) Short vowel story to introduce sound

2) Tracing worksheet 3) Wheel of phonograms--student rotates the circle and reads the words he makes; verbal clues are given by the teacher as needed.



Evaluation: Assessment was made by having student re-read stories on the worksheet and wheel.

Sample Lessons: Comprehension Skills*

There are only two examples given here for reading comprehension skills, because the series adopted by the district (Houghton-Mifflin) has so many good lessons for teaching reading comprehension that few others are needed.

---

*Other suggestions may be found in "Reading Remediation: An Instructional Module for Inservice Training." Frankfort, Kentucky 1979.

Also, much of what appears to be difficulty with reading comprehension may, in fact, be a more basic problem with language development, which is better treated through association of concepts with words (field trips/language experience charts) and "bombardment" of the child with simple--but gradually expanding--oral conversations.

What follows is simply an illustration of two ways in which teachers may assist children who have difficulty in comprehending what they read. The examples given are teacher-designed adaptations of comprehension activities included in the district's basal series.

Sample A (Suggested by Virginia Liddle, Garden Springs Elementary School):

For first grade, the teacher might ditto the "sentence building" exercises in the Houghton-Mifflin reading series, so that each child arranges the words to form the sentences, and pastes them onto another paper in the correct order. This is an adaptation of the suggested technique of using large word cards with a group of children, which requires every child to participate at all times. The habitual non-participators, who normally pay attention only when they are called on, are quickly identified. They soon learn that they have to listen and work when the others work, unless they want their words still on their desks waiting to be pasted on, when recess time comes. Many skills are learned, such as sentence sense, identification of sight words, and punctuation. The low language arts group still in the readiness book, might be encouraged to participate and permitted to watch other children who sit near them and "copy" what they are doing. This may help them to learn without pressuring them to do anything they can't do. They enjoy taking part in a whole group activity.

Sample B (Suggested by Susan Daniel Henry, Northern Elementary School):

"Whale's Tale" game (see Figure 7)

The purpose of this game is to reinforce understanding that a sequence of events in a story plot, or in one or two sentences, leads to predictable outcomes or anticipated situations.

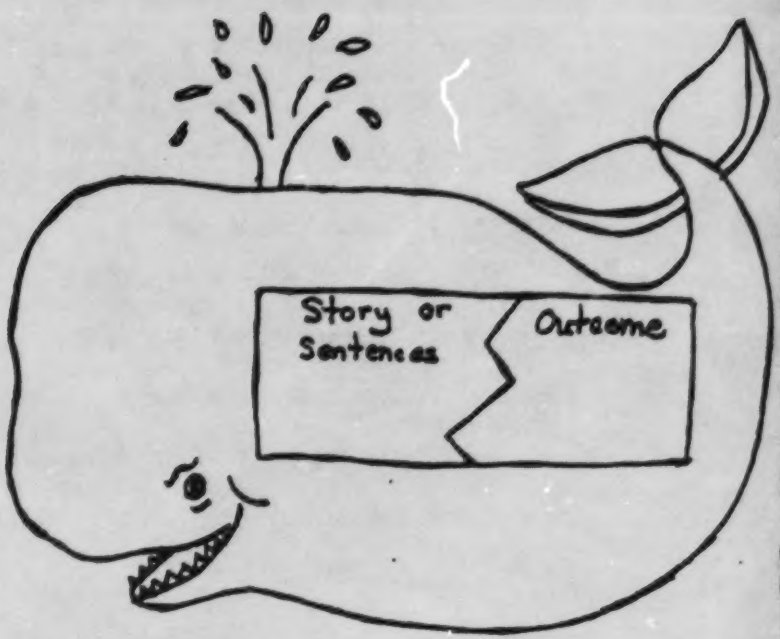
Objectives: After hearing the teacher read aloud the first part or one or two sentences of a story, the student will be able to choose from three endings the teacher next reads aloud, the correct or most predictable outcome. (80% mastery - 2/3 times)

Materials: Oaktag (approximately 12" x 18"), magic markers, crayons, 6" x 8" or 4" x 7" puzzle cards (as many as desired for use), laminating paper, felt (optional only if used on felt boards)

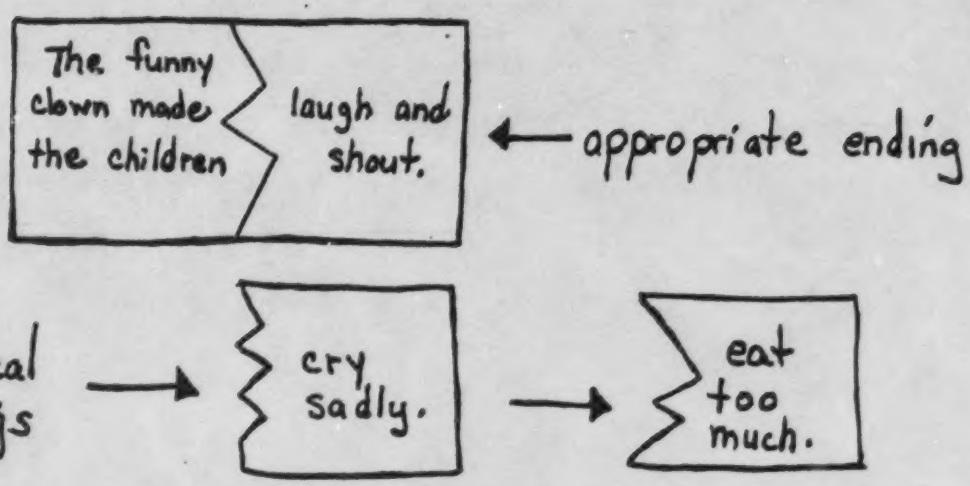
Procedure: 1. Teacher reads aloud the first part of a short story card or one or two sentences if only these are used. 2. Teacher pauses . . . then reads three endings. (One is appropriate; two are illogical.) Be careful not to let the pupils see the puzzle-shaped edges of the "ending" cards. 3. Ask one child to choose the best ending as the outcome of the story. Have him repeat the ending he chose in his own words and tell why he chose that particular ending. Encourage discussion. 4. Ask the child to come up and see if the ending puzzle card he chose fits the story puzzle card. If the puzzle-card fits, he may pin it (or stick it if felt is used) on the whale. He then wins one point. He made a "whale of a tale!" 5. Other pupils follow the same procedure. The child who has the most points wins the game.

FIGURE 7

"Whale's Tale"



example— puzzle-cards



MEASURING PROGRESS

The measurement of student progress is an essential component of the reading program for low-functioning students. If done correctly, measurement has direct implications for instruction. Four methods were used for this purpose in the regular classroom, spring 1980. None was time-consuming and all could be translated quickly and easily into suggestions for teaching. They were: 1) end-of-magazine tests from reading series, 2) percentage scores derived from skills assessed in workbook or by reassessment tests, 3) oral reading data on words read per minute, and 4) percentage scores on comprehension questions asked after silent reading.

End-of-Magazine Tests from Reading Series

Teachers in the district will be familiar with these printed criterion-referenced tests. Mastery on each of the subskill tests is determined by an 80% score (usually 4 out of 5 examples correct). Subtests can be scored with the teacher's key while students sit at the reading table and then returned for immediate feedback. Recording of results on the cover of the test booklet is a quick and easy process which provides the teacher with instant information on: overall achievement in series at this level, separate scores for decoding, comprehension, and reference/study skills components, and individual scores for each of the subskills taught. The information may be used to make changes in the level of book assigned (too hard/too easy), to plan a more concentrated program for any of the three general components, or to identify individuals who need re-teaching on specific subskills. Use of the management card (which requires punching holes to denote subskills mastered) proved to be time-consuming, yet added little useful information.

Percentage Scores: Workbook or Reassessment Tests

A continuous record of subskill attainment can be maintained by converting the fraction-correct score on any workbook page or reassessment test to a

percentage. Changing all subskill reassessments to a percentage gives the teacher a standard to which all progress can be compared. Percentages can also be easily graphed or charted. Students can be taught to write scores as fractions, using the number correct as the numerator and the total number on the page as the denominator as shown in Figure 8.

FIGURE 8

Record of Percent Correct on Subskills

	Comma in Series	Short o	Alphabetical Order
Jerry	11/15 = 73	15/16 = 94	4/4 = 100
Susan	15/15 = 100	9/15 = 56	3/4 = 75

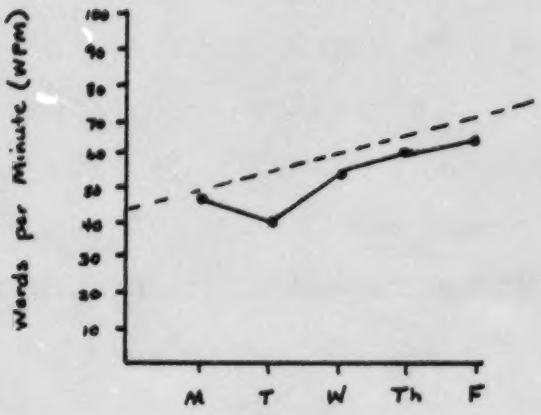
Each day one child with the best attention or performance in reading group can be selected to use the calculator to change the fraction to a percent (decimal). Third graders did this easily, and worked hard for the reward of being chosen to use the calculator.

Oral Reading Data: WPM

Continuous data on progress in reading in context (words per minute) can also be collected easily and quickly. Data can be recorded while students are engaged in directed silent reading. The teacher circulates around the group and asks selected children to "read to me what you're reading now." By using a stopwatch or a watch or clock with a second hand, the teacher can say "go" and then "stop" when the child has read orally for exactly 60 seconds. While the child reads, the teacher records any decoding errors not corrected by the child. Then the teacher asks the child to "count the number of words you read and whisper this number to me so I can write it down." (It goes without saying that the teacher may want to double-check the count for some children who report that they have read 934 words a minute!). This number of WPM is recorded as is since it is the count of words read in a minute. The teacher

can also estimate quickly whether the child is still performing within the range of instructional level (95% - 97% accuracy) in this book. Since readability difficulty levels vary among selections in any basal, the teacher should not give too much "weight" to a single one-minute sample. The data is useful, however, in looking for a trend in the child's performance--up, down, or stable. An example is provided in Figure 9.

FIGURE 9



The overall trend here is "up"

The teacher's record of decoding errors can also be used as a basis for planning remedial instruction. (For example, noting that a child consistently missed words with the ending "tion" will help the teacher decide on necessary remediation.)

Percentage Scores: Comprehension

A continuous record of each child's performance in comprehension can also be maintained without any extra effort. All the teacher needs to do is list each child's name, and the date whenever the reading lesson includes silent reading followed by discussion questions. Simply mark a tally (1) for

each correct response by the child, and a zero for each question that the child was asked but answered incorrectly. Each sample of five questions asked gives you a possible 100%; one error = 80% as shown in Figure 10.

FIGURE 10

Record of Percent Correct on Comprehension

Date	2/12	2/18	2/23
Susan	11000 = 40	11100 = 60	10000 = 20
Jerry	11110 = 80	~~1111~~ = 100	11011 = 80

This is a crude measure, but does enable you to distinguish between children whose comprehension is usually 80 - 100%, and those who score consistently in the range of 40% or below. The scores of the first child (Susan) indicate an obvious need for further diagnosis and remediation.

With the exception of the magazine test scores, all of the data can be kept on a single recording sheet as illustrated in Figure 11.

FIGURE 11

Name	Date	Oral	Comprehension	Skill

None of these procedures is complicated or time-consuming, but all do enable the teacher to monitor student progress continuously and to make valid instructional decisions based on the data obtained. This kind of record is also extremely useful in determining grades and in communicating with parents and other professionals about the child's progress and instructional needs.

CHAPTER THREE

TEACHING WRITTEN LANGUAGE SKILLS TO THE MAINSTREAMED SPECIAL CHILD

This chapter will present suggestions for working with mildly handicapped children in regular elementary classrooms in the areas of spelling, handwriting, and selected aspects of written expression. In each of the three areas, suggestions will be given for assessment and evaluation of progress, and lesson plan/activity samples will be included.

It should be emphasized that problems in written language are often related to more serious difficulties in language development and/or reading, and that the classroom teacher takes a supportive role in remediation of language problems with major assistance from the speech or reading therapist, the special education teacher, and other support personnel.

SPELLING

Most children with difficulty in the decoding aspects of reading also have problems in spelling. Other children who do not experience difficulties in reading may still have trouble with spelling, since spelling requires recall of isolated abstract letters in correct sequence. And since spelling may be a rote memory task, it is equally possible for children to be good in spelling but poor in reading comprehension. Also, it is quite common for children to score perfectly on the weekly test, but to misspell the same (or related) words on another written assignment.

There are many ways to modify the classroom spelling program without investing large amounts of teacher time or making massive revisions in the program. Examples follow.

Modifying Assignments in Regular Spelling Book

Some children with spelling difficulties are capable of learning to spell the words in the regular spelling book--and in the way suggested by the book--if they just don't have to learn all of them. Fifteen new words in a week may

be too many for some third graders. For the child who has spelling difficulty, try reducing the number of words s/he has to master, but insist that the reduced number be practiced faithfully and spelled correctly. This is much better than allowing consistent failure.

Other children may be able to learn to spell the words assigned, but are unable to complete the exercises in the spelling book either because they can't read well enough or don't understand what they are to do. For these children, the instructions may be read aloud by a buddy (student helper). Or, the teacher might tape record the explanation and discussion of the lesson as the entire class "goes over" the assignment prior to independent work time. The child with reading/spelling difficulty can listen to the tape (using a headset) while completing the exercises.

It should also be possible for the teacher to allow the child to skip the exercises in the book and to learn the spelling words simply by practicing them. While the ancient practice of "write each word ten times" has limited value, the Fernald method (1943) may be effective* In this method, the child finger-traces words written in large script, while looking at the word and saying it slowly. When s/he has learned the word, s/he writes the entire word (without looking) on the back of the paper. The child is not allowed to erase or correct errors, but must instead start tracing again until s/he can write the whole word correctly from beginning to end.

Unique Approaches Based on Learning "Styles"

Two different approaches, one based on a "visual" and one on an "auditory" learning style, were introduced during the classroom experience in an attempt to help children with spelling problems. Each was helpful to some children but not to others, and neither was extremely time-consuming for the teacher.

---

*Fernald, G. Remedial Teaching in Basic Subjects. New York: McGraw-Hill, 1943.

The "visual approach" was adapted from the suggestions of Shefter (1963).* It consisted of asking students to write (3 times each) any spelling word(s) that they had missed, and to write the incorrect part either in a different color, or in very large letters. If the child spelled the word "different" as "defernt," s/he would practice writing it like this:

different

If s/he spelled the word "laugh" as "laff," s/he would practice writing it like this:

laugh

The rationale is that the large letters (or different colors) call attention to the part of the word on which the child needs practice.

Each day a test was given (it was pre-recorded on tape) to the entire class. Early every morning, each of the 15 words was dictated, used in a sentence, then dictated again, for the students to spell. The teacher checked the test during a morning break and circled any words that were spelled incorrectly then returned the papers to students. The s/he demonstrated on the board how children were to practice the words they missed. At the end of the day students were required to hand in the morning test, stapled to another piece of paper on which they had practiced (in the special way) each word they had missed that day. The procedure was followed every day. The spelling grade for the week was the one which they received on the final test on Friday after four days of practice. Some children who had been experiencing difficulty asked to do their spelling this way from that point on, and their grades reflected significant improvement.

The "auditory approach" was an extension of the technique for learning two-syllable words suggested in the 3rd grade spelling book adopted by the

---

*Shefter, H. 6 minutes a day to perfect spelling. New York City: Washington Square Press, Inc., 1963.

district (Kottemyer). It consisted of dictating each of the fifteen words one syllable at a time, emphasizing the sounds of letters, then asking for class responses to the questions:

"What letter does the syllable start with?"

"What letter does the syllable end with?"

"What vowel sound do you hear?"

If, for example, the word was "batter," the teacher would first dictate the whole word in syllables, "bat--ter." Then she would say: "Think bat." What letter does it start with?" etc. Next, s/he would say: "Think ter," and repeat the same three questions. This was a daily whole-class exercise, without additional follow-up, except that the teacher checked the test/practice papers for accuracy each day. Again, some children found the method so helpful that they asked to do their spelling this way all the time from that point on. They were able to continue the method individually by working together in pairs with one child dictating the words to the other.

"Special Spellers"

As an incentive for mastering the spelling words, you might set up a "special spellers" program.* Students who score 100 on the weekly pre-test, given Monday (or Tuesday) may skip the rest of the regular spelling assignments for the week, and substitute special work with ten (usually big, long, hard) words of their choice. Special work consists of doing puzzles, writing sentences and rhymes, and making up games in which these words are used. The names of special spellers may be posted on the bulletin board the day after the pretest.

Special Problems

Programs for students with special problems need to be worked out with the help of a consultant. The example which follows was designed by a special education consultant and implemented in a regular classroom with a minimum of effort by the classroom teacher. It was designed for a sixth grade student who

*Adapted from an idea by Devon Roxberry, Cardinal Valley Elementary School

consistently reversed the letters "b" and "l" when spelling the suffix "able." All other attempts at remediation had failed, but this program was successful (see Figure 12).

The program was later expanded to the spelling of whole words. Each word with the suffix "able" was recorded on a series of five Langauge Master cards, each one giving fewer cues. On the first card, the whole word was spelled aloud and shown visually. On the second card the last letter was omitted and the child had to add it. Then finally, on the last card, the child spelled the entire suffix.

Other Suggestions

The following suggestions have also been used successfully with children who have spelling problems.

--Cut spelling worksheets into small strips and give them one at a time to students who panic at the sight of whole worksheets.

--Use an opaque projector to project spelling words on the chalkboard, and allow students to trace words on the board.

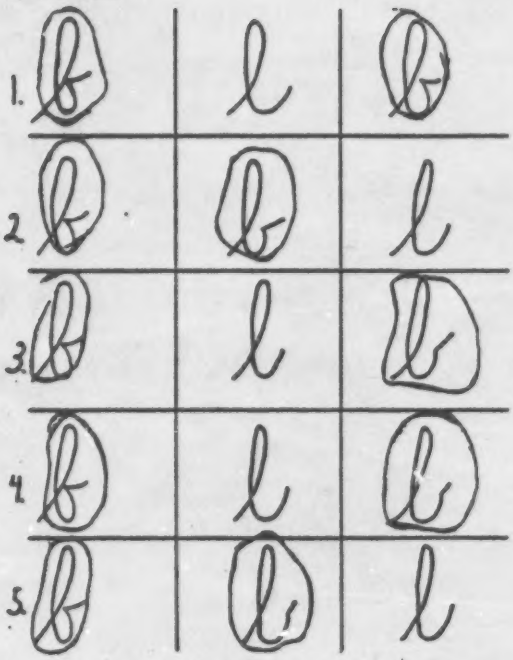
--Allow students to paint words with brush and plain water on white paper. As paper dries, discouraging spelling errors become invisible.

HANDWRITING

Taken as a whole, handwriting is a complex activity. But when separated into component parts, handwriting problems can be assessed and appropriate remedial programs can be implemented. The major components of handwriting skills are letter formation, slant, size, space, and alignment. Although the suggestions given here were used for teaching cursive writing, they could also be applied to manuscript instruction. Suggestions for assessment of problems evaluation of progress, and sample lesson plans/activities will be presented.

FIGURE 12

Circle b



Match the row

bl	dl	lb	lP	bl
able	albe	ale	adle	able
ble	lbe	ble	bel	ebl
portable	portalbe		portable	
enjoyable	enjoyable		enjoyalbe	
workable	workalble		workable	
lovable	lovalbe		lovable	
enjoyable	enyojable		enjoyable	
tworkable	workable		wroKalbe	
lovable	lovable		lovabel	

Say and write	Answer
① The alphabet. abcdefg	abcd efg
② After a comes b	b
③ Look at able. able	able
④ Listen to able. a-ble	a-ble
⑤ Write able able	able

Assessment/Evaluation of Handwriting

The best way to evaluate problems in handwriting is to observe samples of the child's written work. This should be done both for handwriting assignments and for written work in other subjects. Evaluation need not be time-consuming and it can be done as a regular part of grading papers.

Using specific criteria, the teacher can grade one handwriting component at a time. A percentage score or letter grade can be determined. The follow chart illustrates writing components, procedures, and criteria for grading (see Figure 13).

Implementing Programs

Remedial handwriting programs can be implemented easily in the regular classroom, with little investment of teacher time and effort. In most cases all that is required is a combination of modelling (show the child what s/he should do to improve) and reinforcement (praise or reward good writing by displaying it on bulletin board, giving pencils to good writers, etc.). One example of a remedial handwriting program follows.

A Sample Remedial Handwriting Program*

1) Statement of the problem: Jimmy's writing was illegible, as shown in the following sample:

Jimmy

august 22
social studies

1. a final beer of cover art
2. closes set stide or a sunny day

*From the work of Susan Daniel Henry, Northern Elementary School

FIGURE 13

Evaluation of Handwriting

letter formation	Compare each letter with model used in the classroom (wall chart or book). Evaluate 4-5 letters per day, using a given assignment	Pass/fail on each letter; is or is not recognizable as the letter in the model (if any doubt, watch the child write the questionable letter, this will reveal strange ways of forming letters, such as extra loops, etc.).
slant	Use a ruler to mark slant of any ten letters on the written assignment, (for example, the first ten). Score 10 for each correct slant (total 100)	Slant for all letters should be consistent in its direction (///// not / ////). Use criteria matching your writing program: for example, 45° //// is often preferred, but consistent 90° (straight up) or consistent backwards slant should also be permitted, particularly with left-handed children.
size	Use a ruler to mark size of any ten letters on the written assignment Score 10 for each correct size (total 100) (size of letters)	Use criteria matching your handwriting program; for example, "tall" letters and capitals should be twice as tall as "short" letters.
space	Use a pen to mark spaces between any ten letters/words on the written assignment (spaces should be)	Use criteria matching your writing program; for example, space between each letter should be consistent and about equal in width to 1/2 the letter, space between words should be equal in width to 2 letters.
alignment	Use a ruler and mark bottom of each of any ten letters on the written assignment (write on the line) Score 10 for each correct alignment (total 100)	The bottom of each letter should rest on the line below it.

Note: Children may want to keep a copy of the models for good handwriting in their notebooks or on their desks. See, for example, the "Right Rat/Wrong Rat" checklist from Frank Schaffer, 1980.

2) Long-range objective: The student will be able to write at least three sentences, making each letter distinguishable from others and making each word recognizable in isolation.

Task analysis of objective:

Correct posture, grip, pressure

Correct formation of each letter

Proper slant of each letter

Correct size of each letter

Suitable spacing between letters and words

Write each letter/word on the line

3) Materials used:

Gardner, Warren H. Text-Manual for Remedial Handwriting

Arena, John I. (Ed.) Building Handwriting Skills in Dyslexic Children

Horn, Ernest 100 Words Most Commonly Used in Writing

Right Rat, Wrong Rat Frank Schaffer Publications, Inc.

4) Procedures: (25 minutes per day with 5 minutes teacher time and 20 minutes practice)

--Discuss with pupil correct posture, grip, pressure; model, observe, praise

--Present model of correct formation for one letter each day. Demonstrate, provide practice and feedback

--Teach proper slant of letters; use "Right Rat - Wrong Rat" models for slant; provide practice and feedback (See following sample).

Mark each l with a green X
if it does not slant the right way.

--Teach correct size of letters, using techniques similar to those in slant (See following sample).

Is my writing too big or too small?
Mark each letter that is too big
or too small with a red X.

cabbage tomato
onion carrot

--Teach suitable spacing between letters/words using techniques similar to those in "slant" (See following sample).

Watch out! This is tricky!
Mark an X above letters that are
too far apart or too close together.
Use a pink pen.

Darth Vader Lead Luke

--Teach writing letter/word on the line (See following sample).

Now see if you can catch me
writing off the line! Mark each
mistake with a green X.

Darth Vader was scary.

In each case, the student was given an opportunity to practice the new skill after demonstrating the ability to discriminate correct from incorrect formations. (See following sample of "write-on-the-line" practice activity).

I went to the movies to see Star Wars. It was relly great and I liked it. really

I like the way you write on the lines almost all the time.

--Remind student of all procedures learned; use whole Right Rat-Wrong Rat checklist as model, provide practice and feedback.

WRITTEN EXPRESSION

The ability to communicate in writing is a high level skill dependent on the acquisition of many prerequisites and/or subskills. Skill in oral language is an obvious prerequisite which will not be discussed here. Instead, a strategy will be outlined for evaluating each child's mastery of the language skills which are considered important for his/her grade level, and a plan will be presented for encouraging children to engage in creative writing.

Evaluating Mastery of Written Language Skills

The textbook adopted by the district included a series of tests on all of the major language skills presented at that grade level (capitalization, punctuation, letter writing, usage, etc.). Two or three days a week (T/TH or MWF) the whole class was given one of those tests (it might consist, for example, of sentences in which the child was to fill in the blank with "saw" or "seen"). It should be noted that the sentences were read aloud on tape before the children took the test in order to give the poor readers an equal opportunity

to respond. After grading the test the teacher could determine which children had mastered the skill (scores of 90% or better) and which ones needed additional instruction. On the following day, those who hadn't passed the test were grouped together for interactive oral language instruction. These lessons were either skill reviews based on an earlier page in the textbook, or ditto sheet, which featured the skill. After the lesson, the teacher re-tested students on this skill to check for mastery.

Developing Applied Language Skills

The children referred to creative language activities as "special language." These activities could be chosen by a child who had met criterion (90%) on the language test the day before. Special language activities were located in the language center, a long table with a typewriter, tape recorders, etc. and/or on language center bulletin boards.

Sometimes the special language activities were different for children in different reading groups, and based on stories they were reading. Some illustrations follow:

SUNBURST

1. Draw a picture of an animal that can hide because of its color. Write the animal's name.
2. Tell a story about your secret hiding place to the tape recorder. I will write it for you and you can make it into a book.

WINDCHIMES

1. Read about the Indians of Mexico-Aztec, Mayan, Toltec. Write a story.
2. Talk to someone in your family about your history. Write it.
3. Learn some Spanish words. Write them and their meanings.

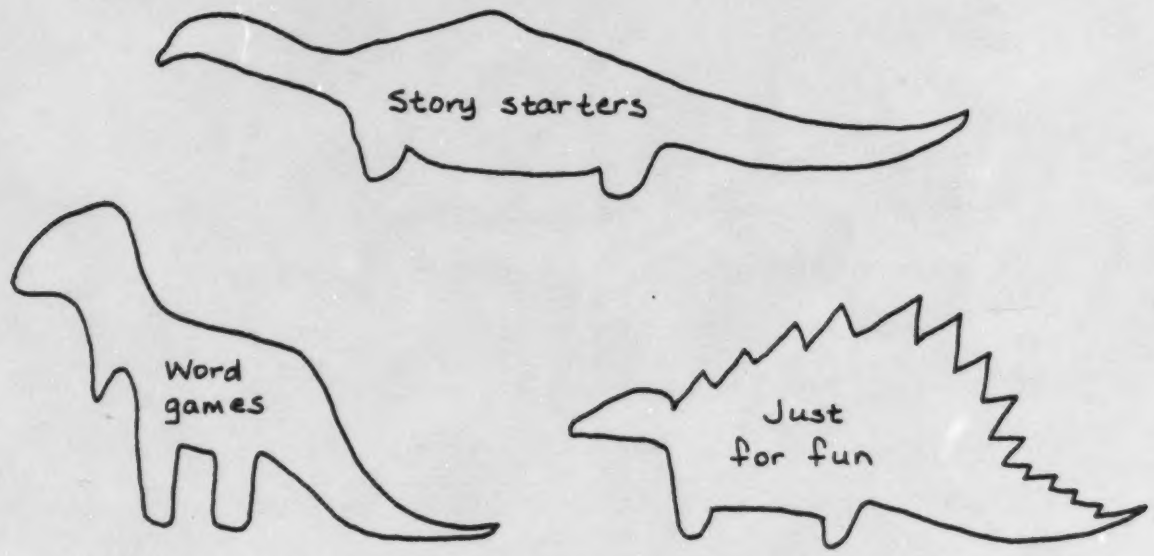
KALEIDOSCOPE

1. Draw a picture of something that has a wheel. Write a sentence to tell how the wheel makes it work.

2. Make a poster about the Olympic games. Write a sentence about your poster.
3. Write about Jesse Owens.

Usually "special language" students could choose any of the activities they wished since there was a wide enough range of difficulty to provide for children of all different levels. A special language board on dinosaurs, which was inspired by a Weekly Reader, follows.

Language tasks were written on colored paper dinosaurs, which could be removed from the bulletin board as the child completed the task.



Some of the tasks were as follows:

Story starters:

"Tiny dinosaurs crawled out of their eggs into the warm sand . . ."

"I was riding along quietly on my brontosaurus, when suddenly I saw . . ."

"Two big dinosaurs were locked in deadly combat. Blood was everywhere . . ."

"I pulled the thorn out of the dinosaur's foot and it licked me on the face . . ."

Word games

--Write a simile, using some part of a dinosaur. Here's one - As sharp as a dinosaur's tooth. Now you try one. As cold as _____ As hungry as _____ As strong as _____ As mad as _____

--Make a list of verbs that tell what dinosaurs do.

--Make an acrostic of your favorite dinosaur

a	b	o	u	t
b	r	o	w	n
t	o	a	d	
a	n	t		
	t	o	p	
	y	o	u	

Just for fun

--Plan a day's meals for a dinosaur.

--Draw and color a dinosaur. Cut it into puzzle parts.

--Cut out some dinosaur footprints. On each one write a clue to help someone guess what kind of dinosaur it is.

A "special language" bulletin board which featured certain aspects of career education, plus other creative activities, was called "What's Your Bug."* It was composed of small lunch bags, from which the children drew out task sheets to complete for their language assignment.

Another special language bulletin board entitled "Rainbow Magic"* featured a pot of gold from which the children drew language tasks written on "gold coins" (round pieces of yellow construction paper).

One of the favorites was the "Cool Stuff" language board.* It included story starters about winter written on mittens which hung from a clothesline There was also a snow prediction chart, and metric tasks involving measurement of parts of the snowman.

*Original ideas by Susan Daniel Henry, Northern Elementary School.

The special children could select special language tasks, too, since they often met criterion on the skill tests. There were simple activities such as acrostics which they could choose, and there was also an incentive for choosing a creative writing task - getting to type your story or poem on a real typewriter!

An Alternative Application: Individualized Language

This material was developed and used by two teachers who team-taught a group of fifty fourth graders.*

This is an individualized language program in which children can progress at their own pace. It combines independent study, one-to-one and group instruction.

The program centers around teacher-constructed packets, grouped by ability levels rather than taken from a specific textbook. The packets are arranged in groups of correlated skills, related to a particular concept such as nouns, verbs, etc. For example, the noun packet includes noun markers, singular/plural nouns, etc. The packets include old workbook pages from grade levels one through eight. The packets also include "information pages," which introduce each skill. The information pages are typed in primary type, with reading levels of 2nd and 3rd grade. They feature simple examples and repeated statements of "rules," and are used as references by children as they work through the packets. Student helpers (those who have already completed this packet) are available for help. When group instructions are to be given one of the teachers calls together those students working on the packet by naming the skill featured in the packet.

The two teachers evaluate each child's work once a week, then review concepts with the child as needed. The child must correct all mistakes, since packets are sequential. During evaluation, the child's work is not

*Peggy Phillips and Gail Toye, Cardinal Valley Elementary School.

graded since they serve as learning activities rather than tests. When children have difficulty they are asked to meet more often with the larger teacher-directed groups or they are given a "student specialist" to help them.

After the child has completed a packet, s/he signs up for a conference with the teacher. This is an oral one-to-one conference in which the teacher asks questions to ascertain the child's mastery of concepts. If the conference indicates a need for more instruction, the student may be recycled through the packet or alternate activities. (A sample of oral conference questions is contained in Figure 14. A sample of a student record sheet is provided in Figure 15.)

Each packet includes "stop signs," red paper octagons which signal points at which the child should stop and select a related game-type activity located in another area of the room. These games feature drills in interesting formats. (A "stop sign" is illustrated below.)

STOP!
Go to the Language Lab
1. Find folder marked "Fun Recipes." Choose 3 that you wish to copy for your own recipe booklet.
2. Now underline all of the nouns in the recipes.
3. Go back and circle all of the verbs.
HAPPY COOKING!
C8

FIGURE 14

Sample of Oral Conference Questions

SUBJECTS

Teacher: 1) What does the subject of a sentence tell you?

PREDICATES

Teacher: 2) What is a predicate of a sentence?

Teacher: 3) Draw a slash mark with the eraser point of your pencil between the subject and the predicate.

1. The kitten ran up the staircase.
2. Billy raced toward the goal line.
3. Our class visited the museum.

N-V PATTERN

Teacher: 4) All sentences to be completed must have a subject and a predicate. In the following sentences find the subject noun and the predicate verb.

1. Chimneys smoke.
2. The dogs barked.
3. The sad little girl smiled when the little boy laughed.

Teacher: 5) Of the following sentences find the N-V pattern.

1. The beautiful star shines brightly.
2. Cactus plants grow in the desert.
3. The furious, dark clouds gathered overhead threateningly.

N-V-N PATTERN

Teacher: 6) How do you locate a sentence with a N-V-N Pattern?

Teacher: Find the N-V-N Pattern in the following sentences.

1. The children took many naps.
2. The famous singer also records country songs for the Golden Label Co.

FIGURE 15

Student Record Sheet

Sentence Pattern Conference

Name Sue Smith

Date February 28

Conference Number 1

SKILL	Satisfactory	Experiencing Difficulty
A SUBJECT: Definition of; knowledge of concept	Excellent verbal response, gave example	
A PREDICATE: Definition of; knowledge of concept	✓	
N-V PATTERN Understands concept of pattern	✓	Remember the "N" of the pattern is the subject
Can locate N-V pattern in a sentence	All correct responses	
N-V-N Pattern Understands concept of pattern		Review! The noun in the predicate answers the question "what"

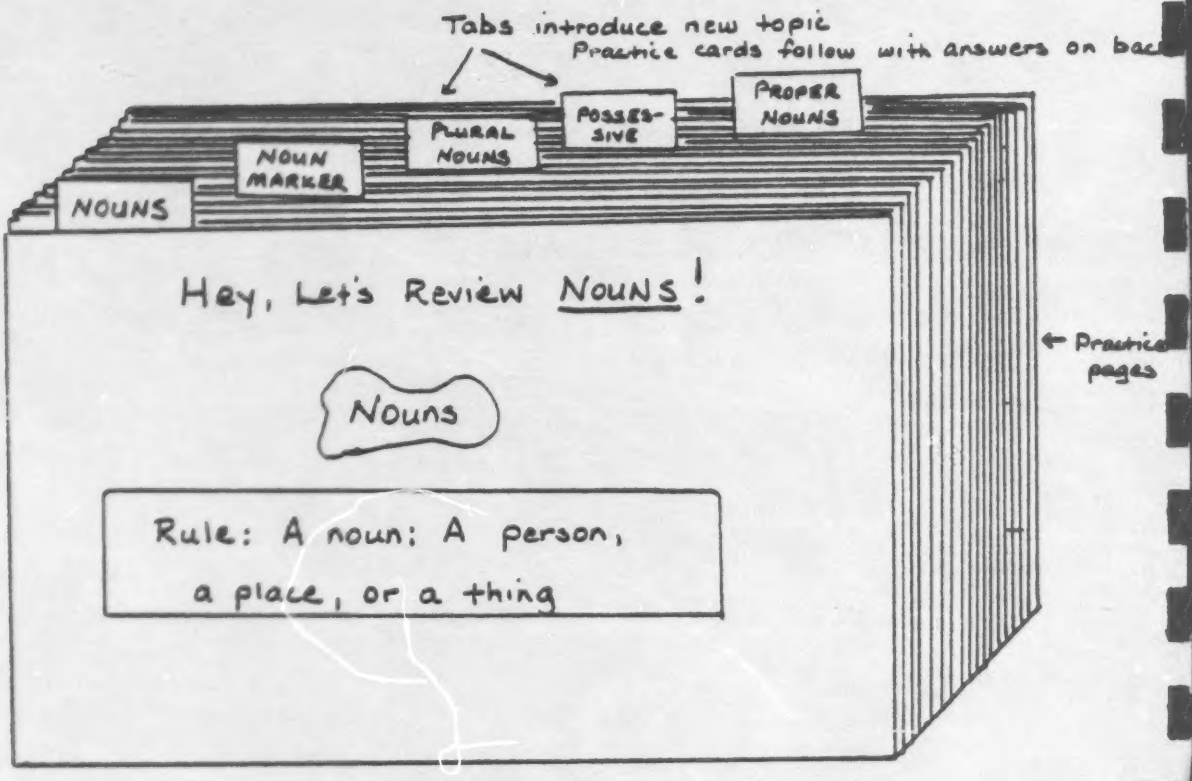
The following illustration shows how one of the packets is put together, and gives a single sample page (See Figure 16).

Summary

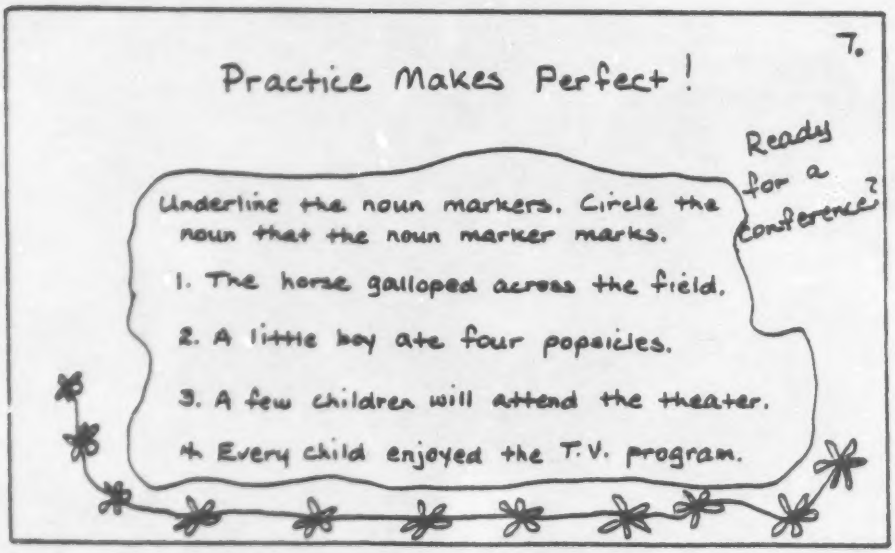
This chapter has presented suggestions for working with mildly handicapped children in regular elementary classrooms in the areas of spelling, handwriting, and selected aspects of written expression. In each of the three areas, suggestions have been included for assessment and evaluation of progress, and lesson plan/activity samples have been included.

FIGURE 16

Sample Packet



Sample Page


7.
Practice Makes Perfect!
Ready for a conference?
Underline the noun markers. Circle the noun that the noun marker marks.
1. The horse galloped across the field.
2. A little boy ate four popsicles.
3. A few children will attend the theater.
4. Every child enjoyed the T.V. program.

CHAPTER FOUR

TEACHING MATH TO THE MAINSTREAMED SPECIAL CHILD

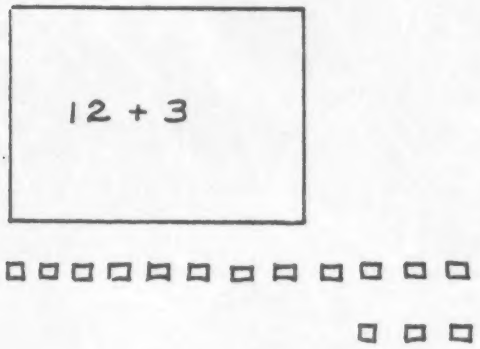
Mildly handicapped children may have special problems with math. It is often difficult for them to work with abstract symbols, to recall unrelated facts, and to solve problems systematically. They may, in addition, have reading difficulties which make it impossible to read the instructions in a book which might otherwise be at their grade level. Strategies for dealing with each of these problems will be outlined, and sample remedial lesson plans will be presented.

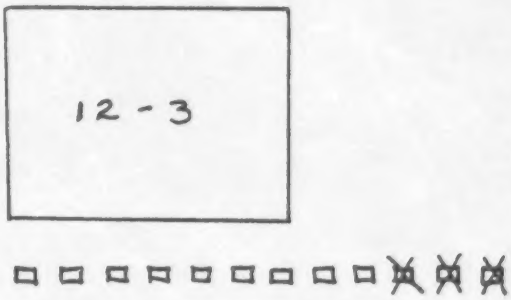
Working With Abstract Symbols

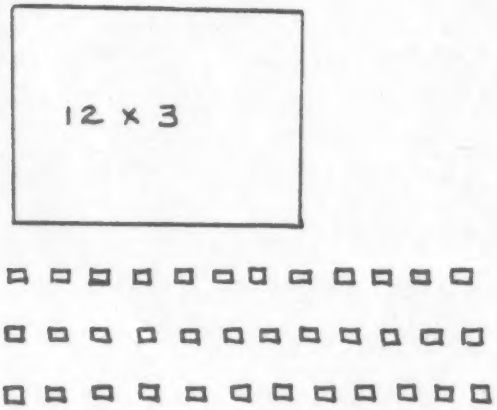
It is important for all children to work with concrete objects in math, and it is especially essential for children with learning difficulties to do so. There are a number of special programs and kits available which include blocks, sticks, and bottle caps for counting, containers for measuring liquids, etc. It is also easy for the teacher to obtain these objects. They need not be expensive or elaborate to be effective. The following examples illustrate how a simple set of wooden blocks (1 inch cubes) was used to help two mildly handicapped third graders to complete their math problems successfully.

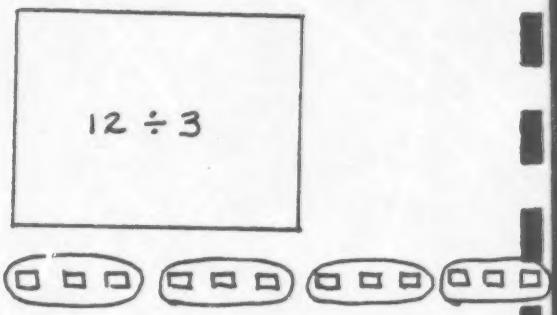
Division with remainders. Jerry had learned his multiplication and division facts through fives and could respond correctly to division facts, but couldn't "divide" when the number to be divided wasn't one of the facts. First, he was shown how to use the blocks to "set up" and solve the problem. For example, in 13 divided by 3, he set up 13 blocks, then grouped them into threes, and counted the groups. There were four groups of three, with one left over. Next, Jerry talked through the problem as he translated the concrete solution into the abstract. "There are four three's in thirteen. But four three's are twelve, so there is one left over. It is called a remainder."

Understand the meanings of signs: +, -, x, ÷. Susan didn't seem to understand that the signs in math problems were signals, and that different signs were signals to perform different operations. She would look at the problem 12 + 3 = ? or $\begin{array}{r} 12 \\ +\ 3 \\ \hline \end{array}$ and write 15, or 9, or 4. First she was given a set of four index cards and the box of blocks, and shown how to use the blocks to set up and solve each of the four problems. The teacher talked through each problem with her as they set it up.

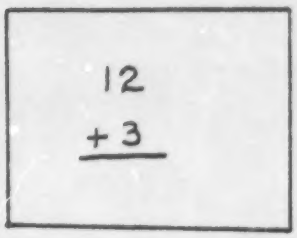


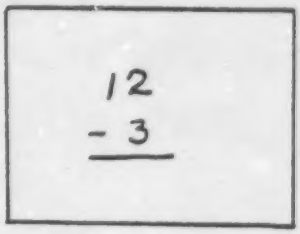


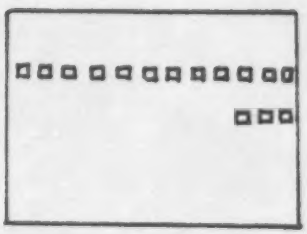


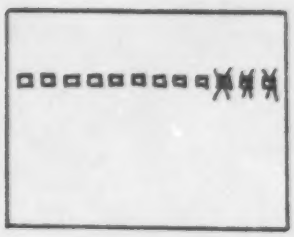


Next, Susan was given a set of 20 more index cards: One each with the same problem in the vertical format, rather than the horizontal, one each with pictures of the block solutions--

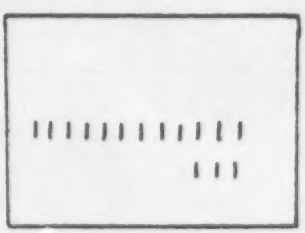


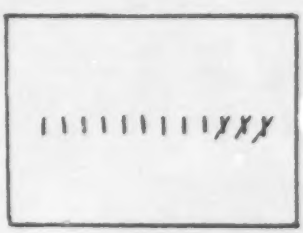


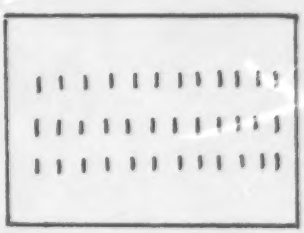


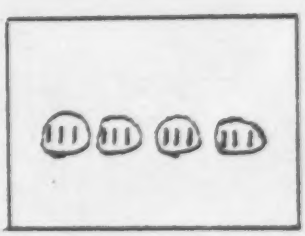


--one each with tally marks representing the block solutions--

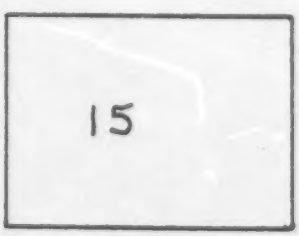


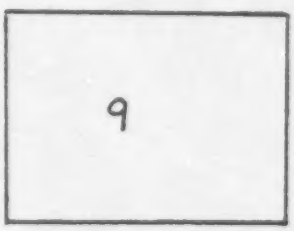


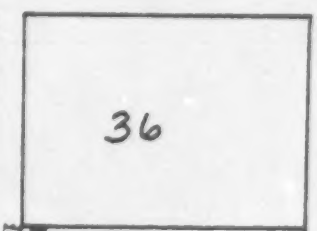


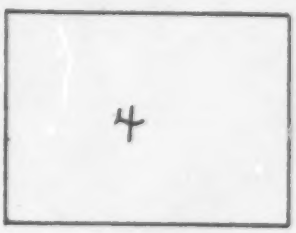


--one each with the answers--

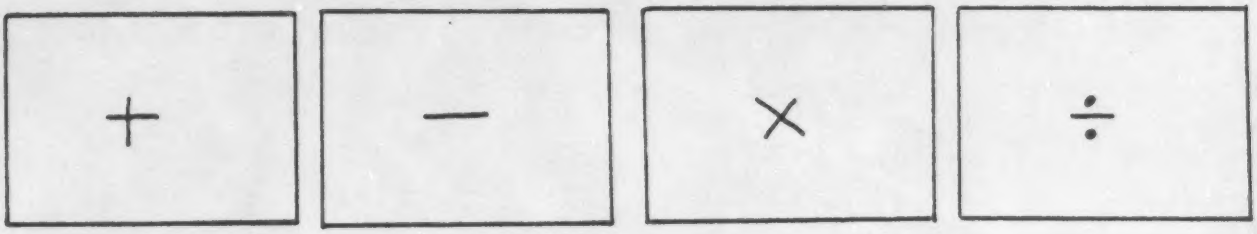




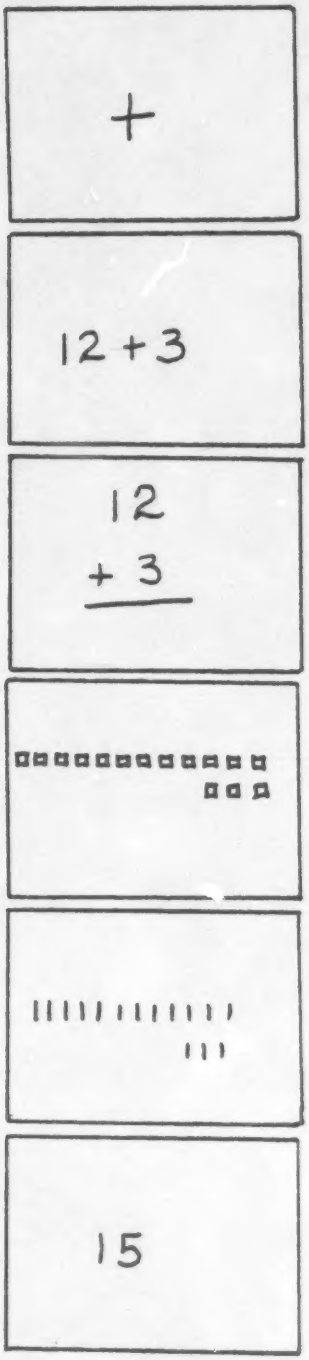




--and one each with the signs representing each operation--



She was then asked to sort the cards into piles. The "+" pile had--



Then Susan was given a worksheet with two other sets of problems of the same kind--

8 + 4	8 - 4	8 x 4	8 ÷ 4
10 + 2	10 - 2	10 x 2	10 ÷ 2

She was told that she could use the blocks and the cards to help her solve the problems. Her score was 100% on this task. She kept the cards at her desk to use in the future and had no further difficulty with distinguishing signs for operations.

Recalling Unrelated Facts

Two procedures were used effectively in helping special children to recall the addition, subtraction, multiplication, and division facts they needed to know. One was to motivate them to learn by giving awards (paper ribbons, stickers, smiley faces, etc.) and rewards (being allowed to use the stopwatch or calculator, etc.) for mastery of a given set of facts. The other was to provide them with an endless supply of interesting practice activities. The examples given below illustrate how to use both of these procedures.

Activity 1*. Write math facts on (cut out construction paper) keys. Write answers on keyholes drawn on construction paper. The student practices facts by reading the fact on paper key, then placing the key under the correct keyhole. The activity can be self-checking, if color coded (e.g., keys with the answer 8 have a yellow square on the back to match the yellow keyhole 8). Child may win paper keys for facts mastered on a later test, or may hold answer keys (be checker) for another child doing activity.

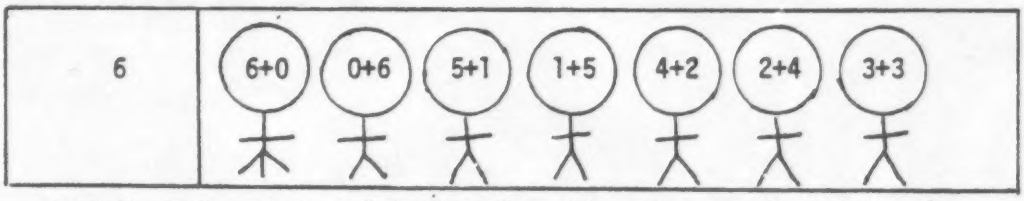
Activity 2*. Draw gameboard with racetrack, start, finish, and 4 pit stops. At "Start," and at each "Pitstop" place an envelope with 4 math facts on a sheet. As soon as child solves the four problems, s/he moves small car to the next pit stop. S/he wins race if s/he misses only two problems on the track (engine trouble!). Check problems immediately by having another child serve as checker. Child may win paper flags for mastery of facts, or hold stopwatch for another child playing game.

Activity 3*. Draw a "computer" on a cardboard box or a sheet of poster board. Write problems on computer cards, and write answers on envelopes or library pockets glued to "computer." Student reads card, then places it in card pocket showing correct answer. May be color-coded for self-checking. Child may win small robot pictures for mastery of facts, or may use calculator to check another child doing activity.

Activity 4*. Make a tagboard math fact wheel, writing answers around the outside of wheel. Write problems on spring-type clothespins. Child clips problem to correct answer and checks on back of wheel to see if answer is right. Child who scores 90% on test at end of remediation may receive a smile-o-gram or certificate of good work.

Activity 5**. Tape record a series of math facts. Give child an answer sheet on which correct answers are folded under and may be unfolded for checking. (e.g., 4 + 3 = ____ | 7)

Activity 6**. Draw stick figures on construction paper, allowing enough room in circle heads for child to write numbers. Ask child to "draw a family." For example, draw the family "six" by writing all possible combinations that add to six, one inside each head.



Activity 7**. Make a "checkers" machine from cardboard box (about 14"x9"x6"), tagboard, heavy adhesive tape, a set of 2"x3" cards, red and white checked contact paper, blue felt, red yarn, a short wire, white glue, and magic markers (see Figure 17).

---

*Activities designed by Mary Lundgren, Northern Elementary School

FIGURE 17

"Checkers"

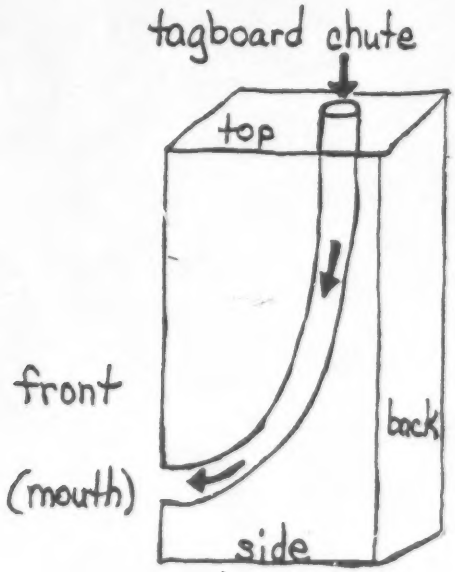
function machine

box – covered with Contact paper

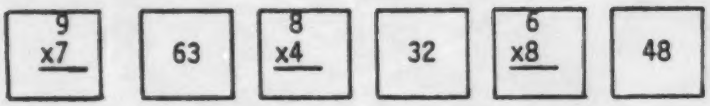
face – tagboard-with yarn hair, eyebrows – magic markers for nose, eyes – Contact for mouth and to cover tagboard ears –

hat, bowtie, flower – tagboard covered with felt

tie "knot" – yarn



Examples of cards that might be used:



front back front back front back

One or more children may work together with "checkers." A child selects a card from the set and reads the front to himself or to the group, then gives the answer. He then drops the card into the top of "checkers" and checks the answer he gave against the number on the back of the card as it comes out checkers' mouth. Since the correct answer is on the back of each card, this activity is self-checking.

Activity 8**. Fold construction paper into 2" squares by making both vertical and horizontal folds. Inside each square write a problem, using a logical progression both across and down the paper, as follows:

6	6	6	6	6	6	6
+0	+1	+2	+3	+4	+5	+6

Child fills in answers:
6, 7, 8, 9, 10, 11, 12

etc.

7	7	7	7	7	7	7
+0	+1	+2	+3	+4	+5	+6

Child fills in answers:
7, 8, 9, 10, 11, 12, 13

etc.

(The complete page would begin with ones, and end with nines. If laminated, page may be re-used.)

Activity 9. Use materials such as "Monster Subtraction," (Enrich, Inc., 1979) sets of worksheets and activities on subtraction facts grouped by numbers. Each number has a name and features a monster cartoon character, such as the "terrible two's" or the "frightening fours." There are dittoed paper badges for mastery of each set of facts, plus award sheets for mastery of all facts.

**Activities designed by Susan Daniel Henry, Northern Elementary School

Solving Problems Systematically

The child with learning difficulties may not know how to approach problem-solving in a systematic way. Instead s/he may guess wildly or give up completely. The following activities illustrate some ways to help the child "think through" math problems involving more than one step.

Acting out "story" problems. Children with great difficulty in word problems may be helped by acting out the solutions to the problems.

--First, someone reads the problem aloud, and those who want to do so may volunteer answers, which teacher writes on the board.

--Next, someone tells "how many" are being told about:

"There are five boys."

"The girl has seven cents."

"The board is three meters long."

--Then the teacher chooses the actors.

"John, Paul, Jerry, Sam, and Phil will be the five boys. They may stand by my desk."

"Susan, you're the girl. Here is your seven cents."

"Mike, pretend this long piece of paper is your board. Here's a meter stick to help you measure it."

--Then someone tells what is happening:

"Each boy buys three candy bars."

"The girl found four more cents."

"The man cuts off one meter."

--Next the teacher and the rest of the group help the actors know what to do.

"Each boy buys three candy bars. I'm giving each boy three tickets that we'll pretend are candy bars."

"Susan found four more cents. Here they are. Now, Susan, count all the money you have."

"Mike, mark three meters on your paper, then cut one off and measure again."

--Then the group states the question and counts the answer.

"Five boys. Each one buys three candy bars. How many candy bars all together? 3, 6, 9, 12, 15"

"Seven cents. Found four more cents. How many cents now? 8, 9, 10, 11."

"Three meters. Cut one off. How many left? 1, 2."

--Next the teacher asks group what they did, and writes the problem on the board.

"Multiply. Five threes are fifteen."

"Add. Seven and four are eleven."

"Subtract. Three minus one is two."

Those children who volunteered answers before the problem was acted out may cheer silently for themselves if their answers were correct. ("Silent cheers" are gestures such as raised fists or hands clasped over heads.)

It is rewarding both to be chosen as an actor and to see that your answer is right. For children who have extreme difficulty with abstract symbols, this type of activity will have to be used often. A transition step - allowing the child to draw objects or make tally marks on paper may be needed before some children can solve problems using only abstract symbols.

Step windows for long division. One of the most difficult things about long division is remembering what to do next. At the initial stages of learning the process, children may be helped by using special "windows" which are numbered pieces of paper taped over parts of the problem. The idea, of course, is to train the child to follow the right steps in the process of long division. You should fade out the windows one at a time, leaving only those needed. Finally, the child should be able to recall all of the steps without the prompts. Two intermediate procedures to help the child get over dependence on the prompts are:

--have another child sit beside him as he works the problem and talks through the sequence, "first I divide how many _____ in _____? . . . second I multiply _____ times _____ . . ." etc.

--leave a model of the step windows taped to the chalkboard or to a magic slate (without the questions on the back of the shutters) so the child can refer to it and write in (then erase) the new numbers for different problems.

Color coding for regrouping problems. It is often difficult to help special children make a transition from concrete objects, such as bundles of sticks, to abstract problems when carrying or borrowing. Color coding of numbers by ones, tens and hundreds may help. Write problems on the board with colored chalk.

red	yellow	green
3	5	7
+ 2	9	4

(ones in green, hundreds in red - this also cues them where to start and stop)

Use white for signs

Then, using all three colors of chalk, demonstrate how to solve the problem.

```
 1
 57
+94
```

"First I add the ones. All the ones are written in green. 7 + 4 = 11. Oops--that's too many for the ones place, so I'll carry to the tens, like this--11 is 1 ten (write in yellow), and 1 one (write in green).

```
 1
 357
+294
 51
```

"Now I add the tens. All the tens are written in yellow. 1 + 5 + 9 = 15. Oops--that's too many for the tens place, so I'll carry to the hundreds, like this--15 tens is 1 hundred (write in red), and 5 tens (write in yellow).

```
 1
 357
+294
 651
```

"Now I add the hundreds. All the hundreds are written in red. 1 + 3 + 2 = 6. There are 6 hundreds. (Write in red) That's the answer - 651!

Students who are good workers might be allowed to do their problems on the board, using colored chalk. Super good workers could be tutors who check the answers using a calculator.

Again, the idea is to fade out the prompts (colors) when they're no longer needed.

Analyzing the sequence of tasks. A child with difficulty in math may not have learned (or may have forgotten) a particular step in the sequence of an arithmetic task, and because of this s/he gets the whole problem wrong. Often the missing skill can be spotted on the child's continuous progress profile, or some other record of the child's progress through the scope and sequence of the math program. The following series of lesson plans illustrates how to identify the necessary starting point in math instruction, and the sequence to follow in helping the child master the final skill. In this case, the final skill is correct use of subtraction facts involving regrouping of one digit, in two columns. Instruction is presented in a series of five sequential steps.* The testing/teaching sequence follows the math program in which the child was placed, and is based on analysis of the content.

Day 1

OBJECTIVES:

1. Child will successfully demonstrate correct use of subtraction facts for 1 column subtraction; no regrouping. Example:

$$\begin{array}{ccc} 9 & 5 & 6 \\ \underline{-6} & \underline{-2} & \underline{-4} \end{array}$$

2. Child will successfully demonstrate correct use of subtraction facts for 1 column subtraction; utilizing zero; no regrouping.

   Example:

$$\begin{array}{ccc} 6 & 7 & 3 \\ \underline{-0} & \underline{-0} & \underline{-0} \end{array}$$

3. Child will successfully demonstrate correct use of subtraction facts for 2 digit subtraction; top column only; no regrouping.

   Examples:

$$\begin{array}{ccccc} 12 & 15 & 11 & 25 & 76 \\ \underline{-\ 7} & \underline{-\ 9} & \underline{-\ 8} & \underline{-\ 5} & \underline{-\ 4} \end{array}$$

4. Child will successfully demonstrate correct use of subtraction facts for 2 column subtraction (2 digits first column only); using zeros, no regrouping. Example: 12 - 0, 15 - 0, 25 - 0, 30 - 0

   Criterion for all above objectives 80% or better on work sheets as assigned.

ACTIVITIES:

1. Pre-test: to assess level/areas of strength and weaknesses.
2. One to one work with worksheets covering above stated objectives: Focus of instruction upon written paper and completion of problems on paper.

Day 2

OBJECTIVES:

1. Child will successfully demonstrate correct use of subtraction facts for 2 column subtraction; no regrouping. Example: 87 -25, 69 -43
2. Child will successfully demonstrate correct use of subtraction facts for 2 column subtraction; utilizing zero; no regrouping. Example:

   95 -20, 50 -30

   Criterion: 80% or better on worksheets

ACTIVITIES:

1. One to one work with worksheets covering above objectives: Focus of instruction upon written paper and completion of problems on paper.

Day 3

OBJECTIVES:

1. Child will successfully demonstrate correct use of subtraction facts for 3 column subtraction (top digits only); no regrouping skills necessary. Example: 147 - 5, 119 - 4, 183 - 2

2. Child will successfully demonstrate correct use of subtraction facts for 3 column subtraction (top digits only); no regrouping necessary.

   Example: $\begin{array}{r} 156 \\ -\ 32 \end{array}$ $\begin{array}{r} 186 \\ -\ 72 \end{array}$ $\begin{array}{r} 117 \\ -\ 13 \end{array}$

3. Child will successfully demonstrate correct use of subtraction facts for 3 column subtraction facts for 3 column subtraction (top digits only) utilizing zeros; no regrouping necessary. Example:

   $\begin{array}{r} 120 \\ -\ 30 \end{array}$ $\begin{array}{r} 140 \\ -\ 30 \end{array}$ $\begin{array}{r} 181 \\ -\ 10 \end{array}$ $\begin{array}{r} 139 \\ -\ 20 \end{array}$

   Criterion: 80% or better on worksheets

ACTIVITIES:

1. One to one work with worksheets covering the above objectives. Focus of instruction upon written paper and completion of problems on paper.

Day 4

OBJECTIVES:

1. Child will successfully demonstrate correct use (and knowledge) of subtraction facts involving regrouping in 1 digit only.

   Example: $\begin{array}{r} 24 \\ -\ 6 \end{array}$ $\begin{array}{r} 32 \\ -\ 5 \end{array}$ $\begin{array}{r} 41 \\ -\ 3 \end{array}$

2. Child will successfully demonstrate correct use of subtraction facts involving zeros, and 1 digit regrouping. Example: $\begin{array}{r} 80 \\ -\ 7 \end{array}$ $\begin{array}{r} 40 \\ -\ 4 \end{array}$ $\begin{array}{r} 50 \\ -\ 9 \end{array}$

   Criterion: 80% or better on worksheets.

ACTIVITIES:

1. On the worksheet, using different colored pens to differentiate regrouping columns and using step by step directions to direct and instruct in regrouping skills.

Day 5

OBJECTIVES:

1. Child will successfully demonstrate correct use of subtraction facts involving regrouping of 1 digit; in 2 columns. Example: $\begin{array}{r} 38 \\ -19 \end{array}$ $\begin{array}{r} 63 \\ -27 \end{array}$ $\begin{array}{r} 54 \\ -36 \end{array}$

2. Child will successfully demonstrate correct use of subtraction facts involving zeros in regrouping of 1 digit, in 2 columns.

   Example:
   $$\begin{array}{rrr} 70 & 80 & 20 \\ -54 & -27 & -16 \end{array}$$

   Criterion: 80% or better on worksheets

ACTIVITIES:

1. One to one work with worksheets.

Reading Math Instructions

Many math books are written at a higher reading level than the special child can handle. Sometimes the reading level of a math book is even higher than the reading level of the reading series for the grade level. This may cause many children to do poorly in math when the actual problem is not math but reading.

Three basic general guidelines should be considered in this event (all are rather obvious):

--Choose math materials with appropriate reading levels.

--Tape record instruction or work orally when necessary.

--Provide poor readers with a buddy who can read them the directions in math when necessary.

Individualized Math Program

This material was developed and used by two teachers who team-taught a group of fifty fourth graders.**

When school begins in August, the teachers spend at least two weeks testing the children (with informal ditto work sheets) to determine their level of ability and skills mastered in all mathematical processes.

---

*Testing/teaching sequence designed by Christy Riffle, University of Kentucky graduate student.

**Peggy Phillips and Gail Toye, Cardinal Valley Elementary School

Those who score below 4th grade level are put into workbooks correlated to their needs. The teachers meet with these student daily. The students may do as many pages as they wish, though they are given specific assignments. When the student completes one workbook, s/he moves to the next with the goal being to be "on the math path" which is posted on the bulletin board. Children are placed on the "path" as soon as their level is known and their ability to work independently is proven.

The "math path" was designed by dividing the math text book into various skills. Each skill includes from 2 to 6 pages depending on the number of problems and the degree of difficulty. Each skill is identified with a specific name on a "stepping stone." (Construction paper cut in flagstone shapes.) There are arrows preceding the "stones" which give page and problem numbers required for mastery of the skill.

As each page is completed, the child checks his/her answers with answer cards located at a checking station. No pencils may be used at the station--only marking pens which are provided. He then records his score in percentage on a personal record sheet which is kept in a loose-leaf notebook. A score of less than 70% would require the child to do the page over again. The following is a sample of the child's record sheet:

Name: _____

Skill preparing for: _____

Page numbers: _____ _____ _____ _____ _____

Scores: _____ _____ _____ _____ _____

Test date:_____ Score:_____

Re-test date:_____ Score:_____

When a child has completed the pages for a skill, s/he takes a test on problems from those pages. S/he may take the test a second time if s/he doesn't pass the first time. But a child who fails on both tests will be

required to do all the pages again. (This causes careless children to be more careful on re-tests.) The tests are given and graded only by the teacher (never by another student). Individual conferences are conducted when the tests are returned. Those passing tests are applauded by their classmates when their new skill mastery is recorded on a chart.

A teacher meets with students individually or in small groups when they begin a new skill, as indicated by their location on the "math path" chart.

Teachers also meet with a group of children who are not well motivated or self-directed or who need the regimen of daily direct instruction, assigning work and collecting it. This group is called "Page by Page." Their work is from the adopted textbook and it consists of one or two pages each day. Their goal is to show that they too can attain the ultimate: the "math path."

Summary

Strategies for dealing with problems in math have been presented in this chapter. Sample lesson plans have been included and ways to individualize have been suggested. These are only a few of the possible techniques that can be used; creative teachers can think of many others.